ALLEGHENY

WILD AND SCENIC RIVER STUDY REPORT

AND

DRAFT ENVIRONMENTAL IMPACT STATEMENT

U. S. Department of Agriculture - Forest Service
Allegheny National Forest, Warren, PA 16365

project must submit to the Commission, on or before the specified comment date for the particular application, the competing application or a notice of intent to file such an application (see 18 CFR 4.36 (1985)). Submitting a timely notice of intent allows an interested person to file the competing preliminary permit application no later than 30 days after the specified comment date for the particular application.

A competing preliminary permit application must conform with 18 CFR 4.30(b) (1) and (9) and 4.36.

A7. Preliminary Permit

Any qualified applicant desiring to file a competing development application must submit to the Commission, on or before the specified comment date for the particular application, either the competing development application or a notice of intent to file such an application. Submitting a timely notice of intent allows an interested person to file the competing application no later than 120 days after the specified comment date for the particular application.

A competing license application must conform with 18 CFR 4.30(b) (1) and (9) and 4.36.

A9. Notice of Intent

A notice of intent must specify the exact name, business address, and telephone number of the prospective applicant, and must include an unequivocal statement of intent to submit, if such an application may be filed, either a preliminary permit application or a development application (specify which type of application). A notice of intent must be served on the applicant(s) named in this public notice.

A10. Proposed Scope of Studies Under Permit

A preliminary permit, if issued, does not authorize construction. The term of the proposed preliminary permit would be 36 months. The work proposed under the preliminary permit would include economic analysis, preparation of preliminary engineering plans, and a study of environmental impacts. Based on the results of these studies, the applicant would decide whether to proceed with the preparation of a development application to construct and operate the project.

B. Comments, Protests, or Motions to Intervene

Anyone may submit comments, a protest, or a motion to intervene in accordance with the requirements of the Rules of Practice and Procedure, 18 CFR 385.210, 385.211, 385.214. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

C. Filing and Service of Responsive Documents

Any filings must bear in all capital letters the title "COMMENTS," "RECOMMENDATIONS FOR TERMS AND CONDITIONS," "NOTICE OF INTENT TO FILE COMPETING APPLICATION," "COMPETING APPLICATIONS," "PROTEST" or "MOTION TO INTERVENE," as applicable, and the project number of the particular application to which the filing is in response. Any of these documents must be filed by providing the original and the number of copies required by the Commission's regulations to: the Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. An additional copy must be sent to: the Director, Division of Project Review, Office of Hydropower Licensing, Federal Energy Regulatory Commission, Room 204–RB, at the above address. A copy of any notice of intent, competing application, or motion to intervene must also be served upon each representative of the applicant specified in the particular application.

D2. Agency Comments

The Commission invites Federal, state, and local agencies to file comments on the described application. (Agencies may obtain a copy of the application directly from the applicant.) If an agency does not file comments within the time specified for filing comments, the Commission will presume that the agency has none. One copy of an agency's comments must also be sent to the applicant's representatives.

Lois D. Cashell,

Secretary.

[FR Doc. 88–28875 Filed 12–14–88; 8:45 am]

BILLING CODE 6717–01–M

Application Filed With the Commission

November 8, 1988.

Take notice that the following hydroelectric application has been filed with the Federal Energy Regulatory Commission and is available for public inspection:

a. *Type of Application:* Preliminary Permit.

b. *Project No.:* 10667–000.

c. *Date Filed:* September 27, 1988.

d. *Applicant:* Youghiogheny Hydroelectric Authority.

e. *Name of Project:* Tionesta Dam Hydro Project.

f. *Location:* On the Tionesta Creek, in Forest County, Pennsylvania.

g. *Filed Pursuant to:* Federal Power Act 16 U.S.C. 791(a) 825(r).

h. *Applicant Contact:* Mr. Robert D. Rizzo, D/R Hydro Company, 10 Duff Road, Suite 300, Pittsburgh, PA 15235, (412) 242–7900.

i. *FERC Contact:* Mary Nowak, (202) 376–9634.

j. *Comment Date:* January 12, 1989.

k. *Competing Application:* Project No. 10626. *Date Filed:* July 15, 1988.

l. *Description of Project:* The proposed project would utilize the existing U.S. Corps of Engineers' Tionesta dam and would consist of: (a) A proposed penstock approximately 250 feet long and 18 feet in diameter connected to an existing intake structure located about 1,000 feet from the dam; (b) a proposed powerhouse containing one new turbine generator having a total installed capacity of 6 megawatts; (c) a 100-foot-long by 50-foot-wide tailrace; (d) a proposed transmission line approximately 200 feet long; and (e) appurtenant facilites. The proposed project would have an average annual generation of approximately 20,000,000 kilowatthours. The applicant estimates that the studies under permit would be about $150,000.

m. This notice also consists of the following standard paragraphs: A8, A10, B, C, and D2.

Standard Paragraphs

A8. Preliminary Permit

Public notice of the filing of the initial preliminary permit application, which has already been given, established the due date for filing competing preliminary permit and development applications or notices of intent. Any competing preliminary permit or development application, or notice of intent to file a competing application, must be filed in response to and in compliance with the public notice of the initial preliminary permit application. No competing applications or notices of intent may be filed in response to this notice.

A competing license application must conform with 18 CFR 4.30(b) (10 and 9) and 4.36.

A10. Proposed Scope of Studies Under Permit

A preliminary permit, if issued, does not authorize construction. The term of the proposed preliminary permit would be 36 months. The work proposed under the preliminary permit would include economic analysis, preparation of preliminary engineering plans, and a study of environmental impacts. Based on the results of these studies, the applicant would decide whether to proceed with the preparation of a development application to construct and operate the project.

B. Comments, Protests, or Motions to Intervene

Anyone may submit comments, a protest, or a motio to intervene in accordance with the requirements of the Rules of Practice and Procedure, 18 CFR 385.210, 385.211, 385.214. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

C. Filing and Service of Responsive Documents

Any filings must bear in all capital letters the title "COMMENTS," "RECOMMENDATIONS FOR TERMS AND CONDITIONS," "NOTICE OF INTENT TO FILE COMPETING APPLICATION," "COMPETING APPLICATIONS," "PROTEST" or "MOTION TO INTERVENE," as applicable, and the project number of the particular application to which the filing is in response. Any of these documents must be filed by providing the original and the number of copies required by the Commission's regulations to: the Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. An additional copy must be sent to: the Director, Division of Project Review, Office of Hydropower Licensing, Federal Energy Regulatory Commission, Room 204–RB, at the above address. A copy of any notice of intent, competing application, or motion to intervene must also be served upon each representative of the applicant specified in the particular application.

D2. Agency Comments

The Commission invites Federal, state, or local agencies to file comments on the described application. (Agencies may obtain a copy of the application directly from the applicant.) If an agency does not file comments within the time specified for filing comments, the Commission will presume that the agency has none. One copy of an agency's comments must also be sent to the applicant's representatives.

Lois D. Cashell,

Secretary.

[FR Doc. 88–28876 Filed 12–14–88; 8:45 am]

BILLING CODE 6717–01–M

Application Filed With the Commission

November 9, 1988.

Take notice that the following hydroelectric application has been filed with the Federal Energy Regulatory Commission and is available for public inspection:

a. *Type of Application:* Preliminary Permit.

b. *Project No.:* 10669–000.

c. *Date Filed:* October 3, 1988.

d. *Applicant:* New York Irrigation District, Boise-Kuna Irrigation District, Wilder Irrigation District, Big Bend Irrigation District, Nampa and Meridian Irrigation District.

e. Name of Project: Twin Springs Irrigation Reservoir and Hydroelectric Project.

f. *Location:* At River Mile 94.3 on the Boise River partially within the Boise National Forest near Idaho City in Elmore County, Idaho.

g. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791(a) through 825(r).

h. *Applicant Contact:* Mr. Carl Padour, 214 Broadway Avenue, Boise, ID 83702, (208) 344–1141.

i. *FERC Contract:* Ms. Julie Bernt, (202) 376–1936.

j. *Comment Date:* January 16, 1989.

k. *Description of Project:* The proposed project would consist of: (1) A 470-foot-high rockfill dam at elevation 3,860 MSL; (2) a reservoir which at maximum pool elevation of 3,850 feet would have a gross storage of 600,000 acre-feet and a surface area of 4,300 acres and at minimum pool elevation of 3,650 feet would have a gross storage of 110,000 acre-feet and a surface area of 1,100 acres; (3) a concrete-ogee-shaped 1,200-foot-long spillway; (4) a powerhouse containing four generating units two each having a rated capacity of 17,250 kW and two each having a rated capacity of 34,500 kW; and (5) a 36-mile-long transmission line. Applicant estimates the average annual energy production to be 317,000 MWh and the cost of the proposed studies to be $2,000,000.

l. *Purpose of Project:* The power produced would be sold to a local power company.

m. This notice also consists of the following standard paragraphs: A5, A7, A9, A10, B, C and D2.

Standard Paragraphs

A5. Preliminary Permit

Any qualified applicant desiring to file a competing application for a preliminary permit for a proposed project must submit to the Commission, on or before the specified comment date for the particular application, the competing application or a notice of intent to file such an application (see 18 CFR 4.36 (1985)). Submitting a timely notice of intent allows an interested person to file the competing preliminary permit application no later than 30 days after the specified comment date for the particular application.

A competing preliminary permit application must conform with 18 CFR 4.30 (b)(1) and (9) and 4.36.

A7. Preliminary Permit

Any qualified applicant desiring to file a competing development application must submit to the Commission, on or before the specified comment date for the particular application, either the competing development application or a notice of intent to file such an application. Submitting a timely notice of intent allows an interested person to file the competing application no later than 120 days after the specified comment date for the particular application.

A competing license application must conform with 18 CFR 4.30 (b)(1) and (9) and 4.36.

A9. Notice of Intent

A notice of intent must specify the exact name, business address, and telephone number of the prospective applicant, and must include an unequivocal statement of intent of submit, if such an application may be filed, either a preliminary permit application or a development application (specify which type of application). A notice of intent must be served on the applicant(s) named in this public notice.

A10. Proposed Scope of Studies Under Permit

A preliminary permit, if issued, does not authorize construction. The term of the proposed preliminary permit would be 36 months. The work proposed under the preliminary permit would include economic analysis, preparation of preliminary engineering plans, and a

United States Department of Agriculture

Forest Service

Allegheny National Forest
P. O. Box 847
Warren, Pennsylvania 16365
(814) 723-5150

Caring for the Land and Serving People

Reply to: 2370

Date: November 1, 1988

Dear Friend,

Enclosed is a copy of the Draft Environmental Impact Statement (EIS) and Study Report for the Allegheny Wild and Scenic River Study. The study area is located in northwestern Pennsylvania and involves the Allegheny River from the Kinzua Dam (near Warren) to East Brady. The study corridor is 128 miles long and one half mile wide.

The purpose of this document is to disclose the findings of Forest Service on the qualifications of the Allegheny River for designation as a Wild and Scenic River.

The Study Report establishes which portions of the river are eligible for designation, based on the criteria in the Wild and Scenic Rivers Act. It also indicates the highest potential classification of each eligible river segment.

The EIS focuses on the results of the Study Report and analyzes the suitability of designating eligible river segments as components of the National Wild and Scenic Rivers System. This suitability analysis is based on the public issues, management concerns, and resource opportunities identified in previous public involvement efforts.

In conjunction with the requirements of the National Environmental Policy Act, the Forest Service is now offering these documents to the public for review and comment. The 90-day comment period begins November 15, 1988 and ends February 13, 1989.

All comments must be in written form and postmarked no later than February 13, 1989. Mail to: RIVER STUDY, Allegheny National Forest, P.O. Box 847, Warren, PA 16365. Comments received during this period will be identified in the Final EIS and Study Report and the document revised as needed.

The Forest Service's preferred alternative is Alternative 3. This alternative involves designation of that portion of the Allegheny River located between Franklin and Emlenton as a National Recreation River. Briefly, our rationale for selecting this alternative is as follows:

1. This segment of river contains outstandingly remarkable "scenic" values which are at some risk of change. Designation would provide the means for managing future development in a way which is compatible with existing river values.

2. South of Franklin, existing land use regulations are not adequate to protect river values. Only seven percent of the corridor is zoned and 20-30 percent of the sensitive visual areas protected under other State or local land use regulations. Adequate regulations exist on other river segments.

3. Much of the shoreline could be developed; 534 acres (5.3 percent of the study corridor) is classified as developable, compared to 132 acres (less than 1 percent of the study corridor) for lands located north of Franklin.

4. Designation is very timely since an abandoned Conrail track, located along the eastern shoreline, is now a private road. This significantly changes existing river access south of Franklin. Access is expected to remain constant north of Franklin.

5. The local/State initiative form of designation is more appropriate than direct designation by Congress. (This process is described in Chapter II of the Draft EIS.) Over 88 percent of the river corridor (south of Franklin) will remain in private ownership; this method maximizes local involvement in preparation of a management plan.

6. While all of the eligible river segments contain outstandingly remarkable values, the river south of Fraklin provides the public with the type of recreational experience expected of a National Recreation River. Other river segments contain more development and expose the user to noisy traffic; this lowers the quality of the recreational experience.

Poor rationale
I have the time
is the element
segments are eligible

If you have any questions, please feel free to contact our office in writing, or telephone (814) 723-5150.

Sincerely,

David J. Wright

DAVID J. WRIGHT
Forest Supervisor

Draft Environmental Impact Statement
Allegheny Wild and Scenic River Study

Armstrong, Butler, Clarion, Forest, Venango
and Warren Counties, Pennsylvania
In Response to P.L. 95-625, November 1978

Lead Agency:	USDA Forest Service
Cooperating Agencies:	USDI National Park Service
	Office of the Governor Commonwealth of Pennsylvania
Responsible Official:	F. Dale Robertson, Chief USDA Forest Service
For further information, please contact:	David J. Wright, Forest Supervisor Allegheny National Forest P.O. Box 847 Warren, PA 16365 (814) 723-5150

ABSTRACT:

As directed by Congress, the Forest Service has studied the Allegheny River from Kinzua Dam to East Brady, Pennsylvania, to determine its suitability for inclusion in the National Wild and Scenic Rivers System. Five alternatives are evaluated in this Draft Environmental Impact Statement and include:

Alternative I - No Action
Alternative II - Kinzua Dam to East Brady (recommending 85 miles)
Alternative III - Franklin to Emlenton (recommending 31.3 miles)
Alternative IV - Kinzua Dam to Tionesta (recommending 33.2 miles)
Alternative V - Buckaloons to Emlenton (recommending 78.3 miles)

In accordance with Section 1506.4 of the Council of Environmental Quality Regulations, the Allegheny River Study Report (Study Report) and Draft Environmental Impact Statement (EIS) are featured here as one document.

The purpose of the Study Report is to determine which sections of river meet the eligibility requirements of the Wild and Scenic Rivers Act, and to indicate the potential classification of each eligible section. The EIS focuses on the results of the Study Report and analyzes the suitability of eligible sections of river for inclusion in the National Wild and Scenic Rivers System based on the issues, opportunities, and concerns identified in the study process.

Alternative III is the Forest Service preferred alternative.

Comments on this Draft EIS must be received no later than FEB 13 1989.

SUMMARY

I PURPOSE AND NEED

The National Wild and Scenic Rivers System, established through Public Law (PL) 90-542, is designed to protect the Nation's free-flowing rivers that "possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values". The National Parks and Recreation Act, PL 95-625, designated ~~parts of~~ the Allegheny River between Kinzua Dam and East Brady, PA, for study to determine its suitability for inclusion in the National Wild and Scenic Rivers System.

About 85 miles of the river, in three non contiguous segments, are eligible for inclusion in the National Wild and Scenic Rivers System. The Forest Service is considering several alternatives for designation of these eligible portions of the Allegheny River. The Forest Service's preferred alternative is Alternative III.

A number of issues and concerns surfaced during the Study:

- Development of future recreation opportunities.
- Cost efficiency and the effect designation will have on the regional economy.
- Selection of a managing agency.
- Loss or curtailment of private property rights
- Ease of Management
- Protection of existing State and Federal Threatened and Endangered plants, wildlife, and fish.
- Protection of existing cultural resources.
- Protection of the river's water quality, free-flowing character, and outstandingly remarkable values.

II ALTERNATIVES INCLUDING PROPOSED ACTIONS

The Forest Service has developed five alternatives for detailed analysis. They respond to the issues, opportunities, and concerns listed in Chapter I, and are based on those sections of river identified in the Allgheny River Study Report as being eligible for designation. No river segments are recommended for designation as "wild" or "scenic" river areas.

ALTERNATIVE I (no action) - Present management continues, no Wild and Scenic River designation.

ALTERNATIVE II (85.0 miles) - All eligible sections would be designated as "recreational" river. Designation would take place through local and State initiative, following the procedures outlined in Section 2(a)(ii) of the Wild and Scenic Rivers Act. Management of designated river segments would be administered by the State (or a political subdivision thereof) following preparation of a management plan. The Forest Service, along with other interested parties, would participate in development of this management plan.

ALTERNATIVE III (31.3 miles) - All eligible sections from Franklin to Emlenton would be recommended for designation as "recreational" river under the local and State initiative procedures outlined in Section 2(a)(ii) of the Wild and Scenic Rivers Act. Management of designated river segments would be administered by the State (or a political subdivision thereof) following preparation of a management plan.

ALTERNATIVE IV (33.2 miles) - All eligible sections from Kinzua Dam to Tionesta (Baker Island) would be designated by Congress as components of the National Wild and Scenic Rivers System. The Forest Service would be the managing agency, and all segments would be managed as "recreational" river areas.

ALTERNATIVE V (78.3 miles) - All eligible sections from Buckaloons to Emlenton would be recommended for designation as "recreational" river under the local and State initiative procedures outlined in Section 2(a)(ii) of the Wild and Scenic Rivers Act. Designated river segments would be administered by the State (or a political subdivision thereof) following preparation of a management plan. The Forest Service, along with other interested parties, would participate in development of this management plan.

III AFFECTED ENVIRONMENT

The Allegheny River is located in northwestern Pennsylvania in the Appalachian Plateau Region. It flows from its origins in Potter County, Pennsylvania, northwest through a small portion of New York State, and then swings southwest through Pennsylvania, converging with the Monongahela River at Pittsburgh to form the Ohio River. The study corridor consists of the section of river between Kinzua Dam (elevation 1,205 feet) and East Brady (elevation 810 feet), and is 128 miles long. Six counties, several small municipalities and towns, and the Allegheny National Forest border portions of the river study corridor.

Most of the shoreline consists of steep hillsides that rise from the river. The steep slopes are interspersed with relatively level "flats" that occur on straight stretches, at the confluence with other streams, and on the inside of river bends. Most of the development is located on these flats.

Portions of the river contain tree-covered islands and steep forested slopes which extend to the water's edge, thus retaining the serene beauty it had when only the Seneca Indians canoed its waters.

Oil and gas resources have been produced in the river study corridor since the original oil boom in the 1860s. Oil and gas development has not impacted visual and water resources to an extent that would keep the Allegheny from being eligible or that would change the possible river classification under the Wild and Scenic Rivers Act. At present, development is proceeding at a very low level because of low prices. Developable coal resources are located in the study corridor below Emlenton, but not in areas eligible for designation.

Sand and gravel aggregates, deposited by glacial meltwaters, have been mined in the river corridor since the river valley became inhabited. In 1972, use of dredging to remove aggregate from the Allegheny River was halted due to increasing environmental impacts. Since then, gravel companies have located other sources to meet demand. The only active pits located within qualifying segments are at Tidioute and West Hickory.

Erosion of the Allegheny Plateau formed the present Allegheny river valley. Deep valleys with steep, forested sideslopes enclosing a sinuous river typify the landscape. As seen from the river, three different landscape characters emerge: (1) a broad river valley having pastoral and rural scenes; (2) a narrower valley with steep sideslopes and natural appearing islands; and (3) an unusually narrow, sharply winding valley with steep sideslopes and a nearly continuous forest canopy.

There are lands within the river corridor which are visually sensitive. They include the islands, undeveloped shoreline areas and focal landscapes. The most vulnerable of these areas are located between Franklin and Emlenton. The following table shows the development potential of private lands within Sensitive Visual Zones (SVZ).

Development potential of private lands within SVZ (expressed in acres)

ALTERNATIVES

	I	*II*	*III*	*IV*	*V*
SHORELINE AREAS AND FOCAL LANDSCAPES					
--Already developed	0	624	474	116	617
--Too steep or narrow to be developed	0	3,154	2,993	96	3,130
--Developable lands	0	666	534	98	653
ISLANDS	0	680	56	392	641

not correct. has to exceed II since there would be no change from present

Various cultures and groups have used the Allegheny River for more than 12,000 years. The region's most intensive occupation and use occurred along the river because it provided the best transportation corridor. Approximately 75 cultural resource sites have been identified in the qualifying segments. One site, "Indian God Rock," is listed on the National Register of Historic Places.

The water quality of the Allegheny River is good except for localized reaches or tributaries that may be degraded. The overall affect of these reaches is minimized, however, by dilution and the assimilative capacity of the river.

Noise is prevalent along the river from Kinzua Dam to just south of Tionesta. Here, PA 59 and US 62 run closely parallel to the river's edge, generating much traffic noise. Below Tionesta, motorboat use is the major source of river noise.

Seventy-three percent of the river corridor is forested. The most common types include mixed oak, Northern and Allegheny Hardwoods, and hemlock. The islands are characterized by riverine forest containing many ages and sizes of trees. A portion of the river corridor (middle sections) is used for agriculture: grazing, corn, and small grains.

The Pennsylvania Fish and Wildlife Database lists 394 species of mammals, birds, amphibians, reptiles, and fish that are likely to be found in the river corridor. Of these species, 34 are designated as State Threatened, Endangered, or of Special Concern. The bald eagle is the only federally listed endangered species known to occur in the corridor. The section of river south of Franklin has high potential nesting habitat for bald eagles. To date, no nests have been found in the river corridor.

The major recreation use of the river is for summer cottages and accompanying water-oriented recreational activities, such as boating, fishing, canoeing, and swimming. There are about 2,000 cottages in the qualifying river segments, many of which form small communities on the flats on the inside of river bends. River oriented recreation use, by activity, is as follows:

"RIVER" RECREATION USE*

Power Boating	Boat Fishing	Canoeing	Shore Fishing	Swimming	TOTAL
4.1	27.8	9.4	5.1	1.3	47.9

** (Expressed in thousands of Recreation Visitor Days (MRVD) per year)*

POWER BOATING occurs below Tionesta where the river slows and becomes deeper and is most frequent between Franklin and Emlenton.
BOAT FISHING occurs in all segments. It is most popular in the upper river and decreases downstream.
CANOEING occurs primarily above Tionesta and between Franklin and Emlenton.
SHORE FISHING, like boat fishing, occurs in all segments, but is more concentrated in the upper river and decreases in frequency downstream.
SWIMMING occurs primarily in the two segments above Tionesta.

Seven river islands were designated as Wilderness on October 30, 1984. They are managed by the USDA Forest Service in accordance with the Allegheny National Forest Land and Resource Management Plan. Other agencies managing public land in the river corridor are the PA Fish Commission, PA Game Commission, and the PA DER Bureau of Forestry.

IV ENVIRONMENTAL CONSEQUENCES

The National Environmental Policy Act of 1969 required that every Environmental Impact Statement (EIS) fully disclose the key impacts or consequences of proposed major federal actions. In this case, the proposed federal action involves designating none, part, or all of the eligible sections of the Allegheny River between Kinzua Dam and East Brady, PA, as part of the National Wild and Scenic Rivers System. Consequences are measured as changes in resource outputs and inputs, as well as positive and negative environmental effects.

The environmental effects of the alternatives are as follows:

Some soil and landform disturbance will occur when new public boat launches are constructed in Alternatives II, III, and V. Each launch site will impact about three acres. Three sites are proposed in each of Alternatives II and V, and two sites in Alternative III.

Oil and gas drilling will be prohibited on the islands and riverbank setback zones in designated river segments. The acreage involved is:

ALTERNATIVES

	I	*II*	*III*	*IV*	*V*
Islands with "*no surface occupancy*" (acres)	0	680	56	392	641
Shoreline with "*no surface occupancy*" (acres)	0	3,845	2,276	436	2,776
TOTAL	0	3,525	2,332	828	3,417
Percent of designated corridor acreage	0	13%	23%	8%	14%

The effects of shoreline setback zones will be minor, since they consist of very narrow strips of land (100-300 feet wide) and most of the affected area can be accessed by alternate drilling techiques. High costs have deterred development of the islands, and are expected to do so in the future.

Generally, sand and gravel operations will be allowed everywhere in the river corridor except on the islands or river channel. Certain screening requirements are recommended for shoreline areas.

The estimated value of the foregone minerals (equal to purchase cost) is:

ALTERNATIVES

VALUE OF MINERALS	*I*	*II*	*III*	*IV*	*V*
Sand and gravel, oil and gas, @$250 per acre (thousands of dollars)	0	170	14	98	160

There is a moderate potential for residential and commercial development to adversely impact visual resources in undesignated river segments between Franklin and Emlenton. Lesser effects exist in those sections of river north of Oil City.

Alternatives II, III and V would offer the greatest protection to visual resources by regulating areas with high probability for future development. Alternatives I and IV offer less protection because they would not protect those sections of the river below Franklin, which contain a high probability for future development.

Cultural resources will not be affected by designation except as a secondary benefit when lands are acquired by the public for other purposes. Cultural resource sites located on public lands are protected by numerous laws and regulations, while sites located on private lands are not afforded protection.

There will be some increase in noise from motorized boats when river segments are designated and use increases. This noise will primarily affect those recreationists who create it; therefore, the effect is considered negligible. Vegetative screening may be used on the upper river segments to reduce road noise associated with PA 59 and US 62.

Designation will have a positive effect on wildlife. Through the management plan, the needs of sensitive species will be addressed, and the amount and quality of habitat will be maintained or enhanced. Potential bald eagle nesting sites, located between Franklin and Emlenton, will be protected under Alternatives II, III, and V.

River recreation use is expected to increase by 30 percent with designation. The river above Tionesta has sufficient public access and support facilities to provide for this increased use. In the lower river segments, public access sites are proposed at President (mid-way between Tionesta and Oil City), at Venango (below Franklin), and at Kennerdell. Here are the projected increases in river recreation use by alternative:

ALTERNATIVES

	I	*II*	*III*	*IV*	*V*
Increased river recreation use (MRVD)	0	14.4	3.5	8.6	13.3

Designation affects the local tax base in two ways. First, aquisition by a public land management agency removes these lands from the local tax base, causing a loss in local tax receipts. The Forest Service, USDA, offsets these losses by returning funds to the counties based on the amount of national forest lands in each county. The following table summarizes by alternative the net effects of these two factors on the local tax base:

ALTERNATIVES

(Amounts expressed in dollars)	*I*	*II*	*III*	*IV*	*V*
Loss in annual tax receipts	0	1,130	613	253	1,104
Annual payments to counties based on Nat'l Forest lands	0	723	0	723	649
Net gain or loss in annual revenue	0	-407	-613	470	-455

Designation will constrain private development on the river islands and in critical visual areas. These constraints will be implemented through a mixture of land use regulations, scenic easements, and fee title purchase as follows:

ALTERNATIVES

(Expressed in acres)	*I*	*II*	*III*	*IV*	*V*
Local Land Use Regulations	0	632	188	294	600
Scenic Easements	0	214	214	0	214
Fee Title Purchase					
- Surface	0	500	188	196	480
- Subsurface (islands only)	0	680	56	392	641

In addition, some form of general zoning would be required for the entire designated river corridor to prevent activities which are inconsistent with designation (i.e., four-lane highways, major industrial complexes, etc).

Designation will provide increased employment in the "recreation services" sector of the economy as follows:

ALTERNATIVES

	I	*II*	*III*	*IV*	*V*
Number of new jobs	0	28	7	17	26

Designation will also increase the flow of dollars into the regional economy as follows:

ALTERNATIVES

(Expressed in thousands of dollars)	*I*	*II*	*III*	*IV*	*V*
Increased annual revenue	0	315	77	188	292

The economic efficiency of each alternative is as follows:

OK, see pp. 4-22 + 4-23 ↑ seems don't match same

ALTERNATIVES

Measures of Economic Efficiency	*I*	*II*	*III*	*IV*	*V*
Present Net Value (PNV) (in thousands of dollars)	0	+801	-832	+1,754	+725
Cost/Benefit Ratio	0	1.17	.61	2.2	1.17

TABLE OF CONTENTS

IV ENVIRONMENTAL CONSEQUENCES

LIST OF TABLES

LIST OF FIGURES

CHAPTER I - PURPOSE OF AND NEED FOR ACTION

A. OVERVIEW

The National Wild and Scenic Rivers System, established through Public Law (PL) 90-542, is designed to protect certain of the Nation's free-flowing rivers that "possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values". The National Parks and Recreation Act, PL 95-625, designated ~~parts of~~ the Allegheny River between Kinzua Dam and East Brady, PA, for study, to determine its suitability for inclusion in the National Wild and Scenic Rivers System.

The Draft Environmental Impact Statement (EIS) documents the environmental analysis process followed in analyzing the proposed alternatives. This chapter specifies the reasons for the study and identifies major issues and concerns related to inclusion of the Allegheny River in the National Wild and Scenic Rivers System.

Chapter II summarizes the alternatives and management guidelines necessary to preserve those values for which the river was designated, and to mitigate adverse environmental effects.

Chapter III describes the present condition of the environment that will be affected by implementation of any of the alternatives.

Chapter IV discusses the environmental consequences of implementing the alternatives.

Chapters V and VI list those individuals who were involved in preparing the document or who contributed information toward its preparation.

Chapter VII is the index.

Appendix A summarizes the public involvement efforts to date.

The Allegheny River Study Report, which documents the findings of the Field Task Force, follows Appendix A.

This document is being circulated for public comment. A Final EIS will be prepared in response to the comments received. The Forest Service will submit the Final EIS to the Secretary of Agriculture, who will submit it to Congress through the President. Congress will consider these recommendations and either act on, reject, or modify the proposed action or one of the other alternatives. Copies of the Wild and Scenic Rivers Act, this document, all referenced materials, and records prepared for this document, are available for public review in the Forest Service office at 222 Liberty Street, Warren, Pennsylvania.

B. PURPOSE

The Forest Service has studied the Allegheny River from the Kinzua Dam to East Brady for potential inclusion in the National Wild and Scenic Rivers System. The Study Report concluded that 85 miles out of the 128 miles in the study corridor are eligible for inclusion in the National Rivers System. It also assigned an administrative classification to each eligible section which will be used in developing future management plans. For further details, see pages *River Study 4-17.*

The Forest Service must now decide which sections of river, if any, should be recommended for inclusion in the National Rivers System. This EIS analyzes the suitability of each eligible section for designation based upon the issues, concerns, and opportunities identified in the study process.

C. NEED

Through the Wild and Scenic Rivers Act (PL 90-542), Congress recognized the need to preserve selected rivers in the United States, which were free-flowing and possessed certain outstandingly remarkable values. This Act, passed on October 2, 1968, did two things. First, it established a national policy for dealing with the Nation's river resource. It states:

> "*....that certain selected rivers of the nation, which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environment shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.*"

Secondly, the Act established the National Wild and Scenic Rivers System and included eight rivers in it. The Act also provided Congress with the means for adding other rivers to the system. Since 1968, Congress has added 42 rivers to the National Rivers System.

D. LOCATION AND DESCRIPTION OF STUDY CORRIDOR

The Allegheny River is located in the Appalachian Plateau Region. It flows from its origins in Potter County, PA, northwest through a small portion of New York State, and then swings southwest through northwestern Penn-

sylvania, converging with the Monongahela River at Pittsburgh to form the Ohio River.

The study corridor consists of the section of river between Kinzua Dam (elevation 1,205 feet) and East Brady (elevation 810 feet), and is 128 miles long. Six counties, several small municipalities and towns, and the Allegheny National Forest border portions of the river study corridor. Approximately 43 miles of river adjoin the Allegheny National Forest.

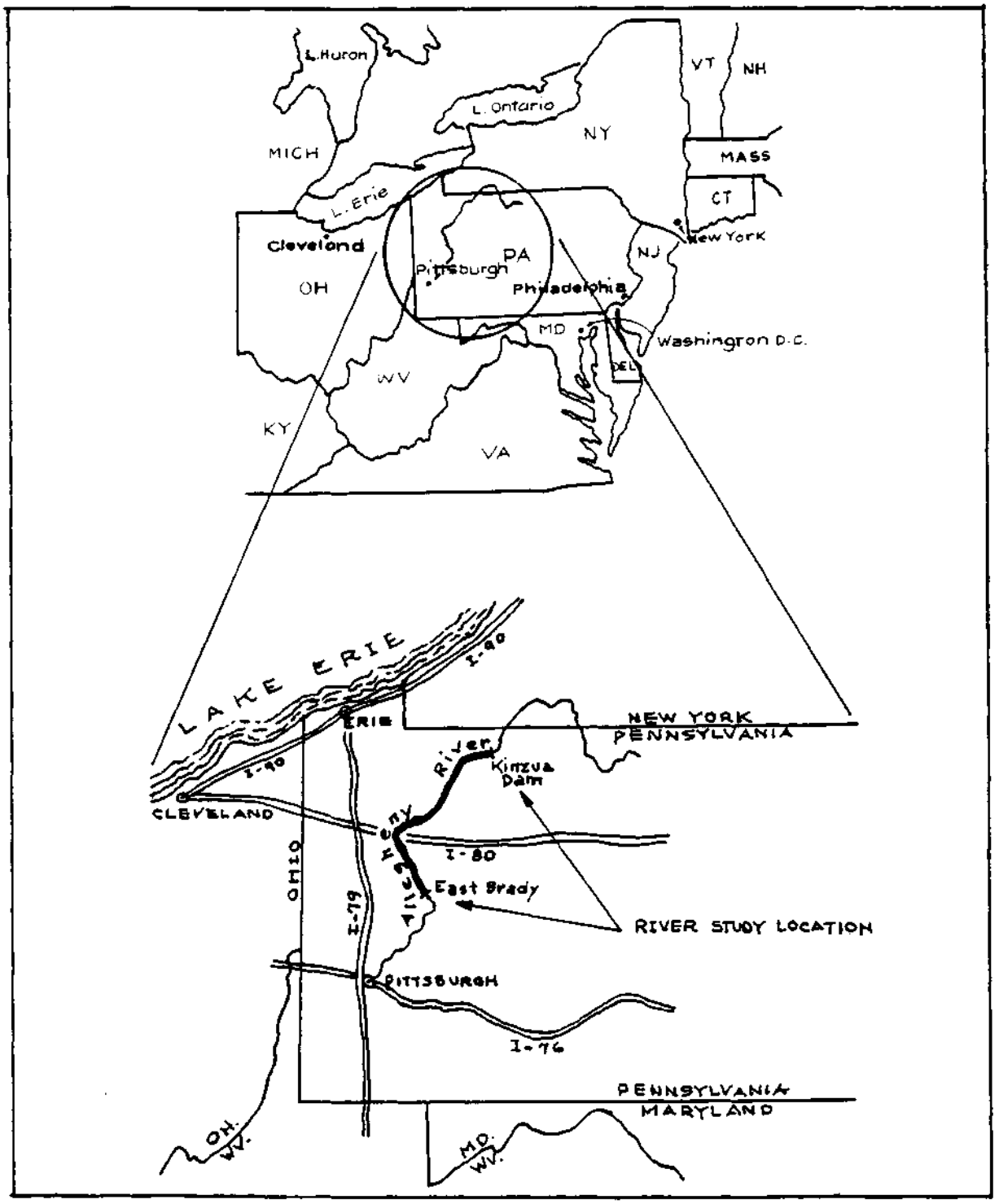
The river flows slowly through hills covered with trees that turn color with the change of seasons. In the early morning a fog often rests on the river until the sun burns it off. Portions of the river, with tree covered islands and steep forested hills extending to the water's edge, retain the wild serene beauty it had when only the Seneca Indians canoed its waters. Settlers built many towns and small communities along the Allegheny River, and this activity has continued for the past two centuries. Openings exist because of fires, timber harvests, orchards, and farming. Except for recently introduced industrial activity, the scene remains distinctly pastoral.

The river has carved a valley out of layers of sedimentary material. In the narrower portions of the valley, the river is 400-600 feet wide, expanding to about 1,000 feet wide in the broader portions. During the ice age, the advance of continental glaciers stopped near this stretch of river. Meltwaters from the glaciers deposited sands and gravels along the valley bottoms.

The river flows in a relatively straight course through the upstream areas. As it nears Oil City, it begins to form sharp bends which characterize its patterns downstream. Many small streams flow into the river in the 128-mile study corridor. However, there are only six major tributaries -- Conewango, Brokenstraw, Tionesta, Oil, and French Creeks and the Clarion River.

The shoreline consists mainly of steep hillsides that rise from the river. The steep slopes are interspersed with relatively level flats that occur on straight stretches, at the confluence with other streams and on the inside of bends. Most of the development is located on these flats.

Figure 1-1: VICINITY MAP



The lower elevation soils were formed from fine to coarse textured materials derived from alluvial glacial and/or colluvial sources, which have accumulated within the valley floors. Soils on the ridges and sideslopes are fine textured and derived from residual materials.

E. STUDY PROCESS

This section documents the general process followed in preparing this Draft Environmental Impact Statement (EIS) and the attached Study Report.

In October 1980, the Forest Service conducted several public involvement meetings in an effort to announce our intent to conduct a study and inform the public of the procedures involved. Several news bulletins were released, inviting the public to help identify public issues, management concerns, and resource opportunities (ICOs).

A field task force was organized with the Forest Service as lead agency, and the National Park Service and Pennsylvania Department of Environmental Resources (DER) as principle cooperating agencies. Other federal, State, and local agencies, and private interest groups also participated.

Members of the field task force participated in a river evaluation float trip in October 1980. During this trip, the group evaluated the Allegheny against a series of eligibility and classification criteria. The results of this study were published in a newsletter in November 1980.

From here on, work centered exclusively on development of the Draft EIS. The team continued to gather data and refine the ICOs. An initial set of alternatives was developed in response to these ICOs. Several public meetings were then held and two tabloids published in an effort to involve the public.

Based upon the comments received, a final set of alternatives was developed. They were documented in a preliminary Draft EIS, which was circulated through the Forest Service for review in November 1982.

At this point, the Forest Service decided not to request a public review of the Draft EIS for these reasons: (1) New Implementing Regulations were issued in September 1982, requiring several items within the existing Draft EIS to be modified; and (2) The Forest Service was in the middle of developing its Land and Resource Management Plan and did not have the necessary resources to conduct two major studies at the same time.

In September 1986, a Forest interdisciplinary (ID) team was appointed to update the preliminary Draft EIS and Study Report. Both documents were completely revised to reflect changing resource conditions and new man-

agement direction. A summary of all public involvement efforts is contained within Appendix A.

Upon completion of the formal 90-day public review period, public comments will be summarized and formally incorporated within the Final EIS/ Study Report.

F. ISSUES, CONCERNS AND OPPORTUNITIES (ICOs)

This section discloses the major public *ISSUES*, management *CONCERNS*, and resource *OPPORTUNITIES* identified through public involvement. ICOs are used directly in the formulation and evaluation of alternatives, and serve as the basis for determining the suitability of eligible river segments for inclusion in the National Wild and Scenic Rivers System.

The central issue in our analysis is "Are existing river values of sufficient importance to warrant additional controls on private land owners?" This central issue is incorporated within the other ICOs listed below and is addressed in the Draft EIS.

1. *RECREATION* - What type of recreational experience is provided on the Allegheny River? Will new recreation developments be needed to accommodate public demand? How will changes in existing recreation use affect the Allegheny's outstanding and remarkable values, and the privacy of adjacent private landowners?

2. *COST-EFFICIENCY AND EFFECTIVENESS* - What type of designation will yield the greatest net economic returns to the public? What effects will designation have on the regional economy? What form of management will minimize resulting administration costs?

3. *MANAGING AGENCY* - Will the designated river corridor be managed by a federal agency, the Commonwealth of Pennsylvania, local government, or some combination thereof? What concerns do local and state governments have over designation? Some publics fear that management by a federal agency will lead to an extensive loss of private rights and the use of condemnation.

4. *PRIVATE DEVELOPMENT RIGHTS RELATIVE TO RESOURCE MANAGEMENT AND COMMERCIAL DEVELOPMENT* - What effects will designation have on the income producing activities of adjacent private landowners? Will existing resource activities be regulated and future industrial and commercial development restricted in the river corridor? How will adjacent private landowners be compensated for lost rights, and how much will this cost?

5. *PRIVATE DEVELOPMENT RIGHTS RELATIVE TO RESIDENTIAL DEVELOPMENT* - How will the rights of small, individual property owners

be affected by designation? What restrictions on existing and future residential development will be necessary? How will these restrictions be enforced: through voluntary cooperation, zoning ordances, scenic easements, or outright purchase of land? Will existing shoreline developments have to be removed?

6. *EASE OF MANAGEMENT* - What is the current level of public ownership in the river corridor? What public land management agencies and local governments are involved? What lands currently in private ownership will be needed to manage the river? How complex will management be under each alternative given the current diversity of land uses?

7. *THREATENED AND ENDANGERED PLANTS, WILDLIFE, AND FISH* - What effect will designation of the Allegheny River have on federal or state threatened and endangered species?

8. *CULTURAL RESOURCES* - What are the existing cultural resource sites in the river corridor? What effect will designation of the Allegheny River have on these sites? What opportunities exist to protect or interpret cultural and historic values?

9. *PROTECTION OF THE RIVER'S WATER QUALITY, FREE-FLOWING CHARACTER, AND OUTSTANDINGLY REMARKABLE VALUES* - What are the existing outstandingly remarkable values which will be protected through designation? What human activities threaten these river qualities, and how can they be mitigated?

CHAPTER II - ALTERNATIVES

The purpose of this chapter is to describe the alternatives used in the analysis and to display, in comparative form, the environmental impacts resulting from each alternative.

Alternatives were developed to respond to the list of issues, concerns, and opportunities (ICOs) described in Chapter I. They represent different length and location options for managing the Allegheny River as part of the National Wild and Scenic Rivers System.

Only those sections of river eligible for designation were used in formulating alternatives. A summary of all eligible sections is contained in Table R-4 of the River Study Report.

Analysis of the ICOs indicated that the alternatives must consider both the property rights of landowners along the river and those river values which caused the river to be eligible for designation. These values are summarized in Section B of the Study Report. The five alternatives described in this section represent five possible plans, each taking a different view of the trade-offs between protecting river values versus maintaining existing landowner rights and current uses along the river.

A. ALTERNATIVES CONSIDERED IN DETAIL

This section describes the five alternatives which were analyzed in the draft Environmental Impact Statement (EIS). Section B briefly describes some alternatives which were considered but later eliminated from detailed analysis.

The alternatives recommend only eligible sections for designation and all eligible sections will be managed as "recreational" river areas (See page R-8 for details). Each alternative contains the following information:

1. The eligible sections are identified along with the river mileage to be managed as "Recreational" river areas.
2. The total miles of non-eligible sections are identified.
3. The description focuses on how the alternative responds to the issues relating to landowner property rights and river values.

When reviewing the alternatives, it is important to remember that each alternative must respond to one or more of the major issues and concerns, and each issue must be addressed in at least one alternative. Section D of this chapter displays, in comparative form, how the alternatives respond to each issue.

In all alternatives, landowners would generally be permitted to continue or start activities similar in nature and intensity to those now present, provided they are consistent with existing land use patterns. River values of those sections not designated will continue to be protected under current law and regulation.

Also, the information contained under each alternative is strictly related to either designation or management of a Wild and Scenic River. Nothing should be construed as limiting the Forest Service from taking necessary action toward implementing its Land and Resource Management Plan. For example, some of the existing river frontage and islands have significant recreational, scenic and ecological values. These lands may be acquired by the Forest Service at some later date on a willing buyer, willing seller basis, regardless of which alternative is selected.

The following table summarizes the designations recommended in each alternative. The column entitled "Total Designation (Acres)" reflects only the area included within eligible sections.

Table 2-1: DESIGNATIONS RECOMMENDED IN EACH ALTERNATIVE

ALT NO.	*SPAN*	*SCENIC (Miles)*	*RECRE-ATION (Miles)*	*TOTAL DESIG. (Miles)*	*TOTAL DESIG. (Acres)*	*INELIGIBLE SECTIONS (Miles)*
I	No Action	0	0	0	0	0
II	Kinzua Dam - East Brady	0	85.0	85.0	27,200	41.1
III	Franklin - Emlenton	0	31.3	31.3	10,016	0
IV	Kinzua Dam - Tionesta	0	33.2	33.2	10,624	8.9
V	Buckaloons - Emlenton	0	78.3	78.3	25,056	10.8

ALTERNATIVE I - No Action

No segments of the Allegheny River are recommended for designation under the Wild and Scenic Rivers Act. This alternative represents a continuation of current management within the river corridor. All future development options remain open. For details, see Figure 2-A (page 2-9).

Future management of National Forest lands within the river corridor will continue to be regulated by the Allegheny National Forest Land and Resource Management Plan. Lands administered by the Pennsylvania Department of Environmental Resources (PA DER), Game Commission, and Fish Commission will continue under current management. All private lands are available for maximum economic development, needing only to comply with local, State, and federal laws.

Existing river values and conditions would be allowed to change over time. No controls will be applied to future development except through local zoning. Additional development is probable in the southern segment and could lead to deterioration of the river's scenic value. In time, this might even disqualify this segment of river from inclusion within the Wild and Scenic Rivers System. Lesser effects are expected on the northern half since it is already heavily developed.

No new recreational developments are planned. Those developments already scheduled as part of the State or federal land management planning efforts will continue, however. The Allegheny National Forest Land Management Plan calls for possible development of a campground near Tionesta in 10 to 20 years. This project may or may not be carried out, depending upon future recreational demand and market conditions.

This alternative does not include any acquisition of land for Wild and Scenic River purposes. However, some of the existing river frontage and islands hold significant recreational, scenic, and ecological values. The Forest Service may acquire some of these lands within the Proclamation Boundary of the Allegheny National Forest (outer boundary of National Forest lands) on a willing seller, willing buyer basis as needed to facilitate implementation of its Land Management Plan.

ALTERNATIVE II - Kinzua Dam to East Brady (85 Miles)

This alternative proposes designation of all eligible sections of the Allegheny River, 85 of the 128 miles authorized for study. All eligible sections will be managed as "Recreational" river areas. This alternative includes 41.1 miles of river which are not eligible for designation. For details, see Figure 2-B (page 2-10).

Under this alternative, actual designation will follow the procedures outlined in Section 2(a)(ii) of the Wild and Scenic Rivers Act. The river will be administered by the State (or a political subdivision thereof) and a management plan developed through State and local initiative. The Forest Service will participate, along with other interested parties.

The procedures for designating a river under Section 2(a)(ii) are as follows:

1. The Final EIS for the Allegheny River is completed and submitted to Congress, through the President, with the recommendation for designation under Section 2(a)(ii).

Congress may either approve this recommendation, select another alternative, or remand the EIS to the President for additional study.

2. If approved, local publics tender a request that eligible sections of the Allegheny River (from Kinzua Dam to Emlenton) be protected by an Act of the State legislature.

3. Interested publics establish a board or commission through the local county governments. The board formulates a comprehensive management plan for the river and adjacent lands. Federal, State, and local governments, as well as other private interest groups and landowners will be consulted in preparation of the plan. The board works directly with DER in defining management responsibilities.

4. After completing the management plan, the board petitions the governor, through DER, to seek inclusion of the Allegheny River in the National Wild and Scenic Rivers System.

5. The Governor reviews the management plan for approval and support. If he approves, the Governor forwards it to the Secretary of Interior, asking that the Allegheny River be added to the National Rivers System.

6. The Secretary of Interior makes a determination that the management plan is sufficient to protect those values for which the river is being designated, and that it is being effectively implemented.

7. The Secretary of Interior then submits the proposal to the Secretaries of Agriculture and Army, the Chairman of the Federal Power Commission, and heads of other affected federal agencies, for review and comment as required in Section 4(c) of the Act.

8. Finally, upon Secretarial approval of the State's request, the Allegheny River is added to the National Wild and Scenic Rivers System by publishing a notice in the Federal Register.

This alternative is designed to provide maximum protection of river values under the Wild and Scenic Rivers Act. It maximizes the total miles recommended for designation, and relies upon State and local initiative to develop and implement an effective river management plan. Section C - "Management Guidelines Common to All Alternatives," summarizes the actions necessary to protect river values and mitigate adverse environmental effects.

This alternative enhances recreational opportunities through the construction of additional public access sites near President, Venango (south of Franklin), and Kennerdell. In addition, a National Forest campground is tentatively planned in the Tionesta area during the next 10 to 20 years. This alternative also includes the longest continuous eligible segment (48 miles) of the Allegheny River which will provide users with an opportunity for quality overnight trips. Under this alternative, total annual recreation use within the river corridor would increase by 43,100 Recreation Visitor Days (RVDs) as a result of designation.

It is estimated that up to 500 acres of land would be acquired (on a willing seller, willing buyer basis) into fee title public ownership under this alternative. In addition, local zoning and scenic easements would be applied to another 846 acres to maintain current conditions on the islands and developable lands within sensitive visual areas.

In total, this alternative would guide private development rights on about 1,346 acres, or 4.9 percent of the river corridor. Administration of the river under local and State initiative will retain maximum control at the local level while providing for a level and quality of private property rights compatible with river values.

There are currently 5,374 acres of public land located within the river corridor. Under this alternative, public ownership could increase to 5,874 acres or 22 percent of the river corridor.

No Threatened or Endangered plant, wildlife, or fish species (federal lists) are known to reside on lands included in this alternative.

ALTERNATIVE III - Franklin to Emlenton (31.3 Miles)

This alternative recommends designation of all eligible river sections from Franklin to Emlenton as "Recreational" river areas. There are no ineligible sections included in this alternative. For additional information, see Figure 2-C (page 2-11).

This alternative would be designated under the procedures outlined in Section 2(a)(ii), as described under Alternative II. The river will be administered by the State (or a political subdivision thereof), and a management plan developed through State and local initiative. The Forest Service would not participate in development of this management plan.

The focus of this alternative is on protecting a representative segment of river diplaying outstandingly remarkable scenic value. The Franklin to Emlenton stretch is considered by many as possessing the highest scenic quality. It is also the least developed section of river, contain-

ing 15 residences per mile, and contains the greatest natural limitations on economic activities due to the narrow floodplain and steep slopes. Actions necessary to protect these values are described under the visual quality guidelines presented in Section C - "Management Requirements Common to All Alternatives".

This alternative maintains the current level of private development options on about half of the river, while providing for more limited development rights and stronger protection of river values on the other half through inclusion in the National Wild and Scenic Rivers System.

Recreational opportunities will be enhanced through the construction of additional public access sites in the vicinity of Venango (south of Franklin), and Kennerdell. Designation is expected to increase total recreation use by 10,500 Recreation Visitor Days (RVDs) annually. This is the result of increased public awareness and better access facilities.

It is estimated that 188 acres of land would be acquired in fee title public ownership (on a willing seller, willing buyer basis) under this alternative. Another 402 acres could have private development rights limited through local zoning and scenic easements. This alternative would constrain *new* private development on about 590 acres, or 5.9 percent of the river corridor. Administration through State and local initiative should retain maximum control at the local level while providing for a level and quality of private development which is compatible with river values.

This alternative currently contains 992 acres of State Park lands, located across the river from Kennerdell. It is estimated that public ownership would increase to 1,180 acres, or 12 percent of the river corridor, under this alternative.

No Threatened or Endangered plant, wildlife, or fish species (federal lists) are known to reside on lands included in this alternative.

ALTERNATIVE IV - Kinzua Dam to Tionesta (33.2 Miles)

This alternative designates all eligible river sections from Kinzua Dam to Baker Island (north end of Tionesta) as "Recreational" river areas. One ineligible river segment, 8.9 miles long, is also included. It is adjacent to the City of Warren. For additional information, see the map in Figure 2-D (page 2-12).

All eligible sections would be designated by Congress as a component of the National Wild and Scenic Rivers System. The USDA Forest Service would be designated as the managing federal agency.

The focus of this alternative is twofold:

1. To protect a representative segment of river containing the pastoral and island landscapes (described on page R-5, *River Study Report*); and
2. To limit the area of consideration to portions of the river corridor located within or adjacent to the Allegheny National Forest.

This alternative contains those sections of river with the highest level of residential development and the fewest limits on future development of any of the alternatives considered. Actions necessary to protect the islands are described under the visual quality guidelines presented in Section C - "Management Requirements Common to All Alternatives".

Existing private development options would be maintained on about half of the river, while providing for more limited development rights and stronger protection of river values on the other half through inclusion in the National Wild and Scenic Rivers System.

No new recreational developments are planned except for the National Forest campground described under Alternatives I and II. This facility is planned as part of the *Allegheny National Forest Land and Resource Management Plan*. Total annual recreational use within the river corridor is still expected to increase by 25,700 Recreation Visitor Days (RVDs) as a result of increased public awareness.

Under this alternative, private development would be constrained on about 490 acres, or 4.6 percent of the river corridor, making it the least restrictive of the four alternatives that propose designation. An estimated 196 acres of land would be acquired in fee title public ownership (on a willing seller, willing buyer basis). Another 294 acres would have limited development through purchase of scenic easements and regulation by local zoning.

There are sizeable holdings of both National Forest and State Game Lands within this alternative. It currently contains 3,773 acres of public lands, the highest percentage of public land ownership (36 percent) of any of the alternatives considered. If designated, public ownership would increase to 3,969 acres or 37 percent of the river corridor. This alternative places the greatest burden on State and federal land management agencies to protect existing river values.

As part of the designation decision, the Allegheny National Forest Proclamation Boundary (outer boundary of National Forest lands) would need to be modified to include the entire river corridor. This change is necessary to provide the Forest Service with authority to purchase sensitive river areas on a willing seller, willing buyer basis. It is estimated that the total area within the proclamation boundary

would increase by 3,000 acres (including both public and private lands) as a result of this decision.

No Threatened or Endangered plant, wildlife, or fish species (federal lists) are known to reside on lands included in this alternative.

ALTERNATIVE V - Buckaloons to Emlenton (78.3 Miles)

This alternative recommends designation of all eligible river sections from Buckaloons to Emlenton as "Recreational" river areas. It also includes 10.8 miles of ineligible river. (These sections are located between Oil City and Franklin.) For additional information, see Figure 2-E (page 2-13).

This alternative would be designated under the procedures outlined in Section 2(a)(ii), as described under Alternative II. The river would be administered by the State (or a political subdivision thereof) and a management plan developed through State and local initiative. The Forest Service would participate along with other interested parties.

The focus of this alternative is on protecting a representative segment of river which displays both outstandingly remarkable scenic value, and the pastoral and island landscapes described on page R-6 of the *River Study Report*. This alternative is very similar to Alternative II and differs only in that the section of river between Kinzua Dam and Warren is not included. Actions necessary to protect these values are described under the visual quality guidelines presented in Section C - "Management Requirements Common to All Alternatives".

Recreational opportunities would be enhanced through the construction of additional public access facilities in the vicinity of President, Venango (south of Franklin), and Kennerdell. This alternative contains the longest continuous segment of eligible river, providing users with opportunities for both day-length or overnight trips. Designation is expected to increase total annual recreation use within the river corridor by 39,900 Recreation Visitor Days (RVDs) as a result of increased public awareness and better access.

An estimated 480 acres of land would be acquired in fee title public ownership (on a willing seller, willing buyer basis). Another 814 acres could have private development limited through local zoning and scenic easements. In total, this alternative would guide private development on 1,294 acres, or 5.2 percent of the river corridor. Administration through "State and local initiative" should retain maximum control at the local level, while providing for a level and quality of development suitable to protect river values.

Figure 2-A - Map of Alternative I

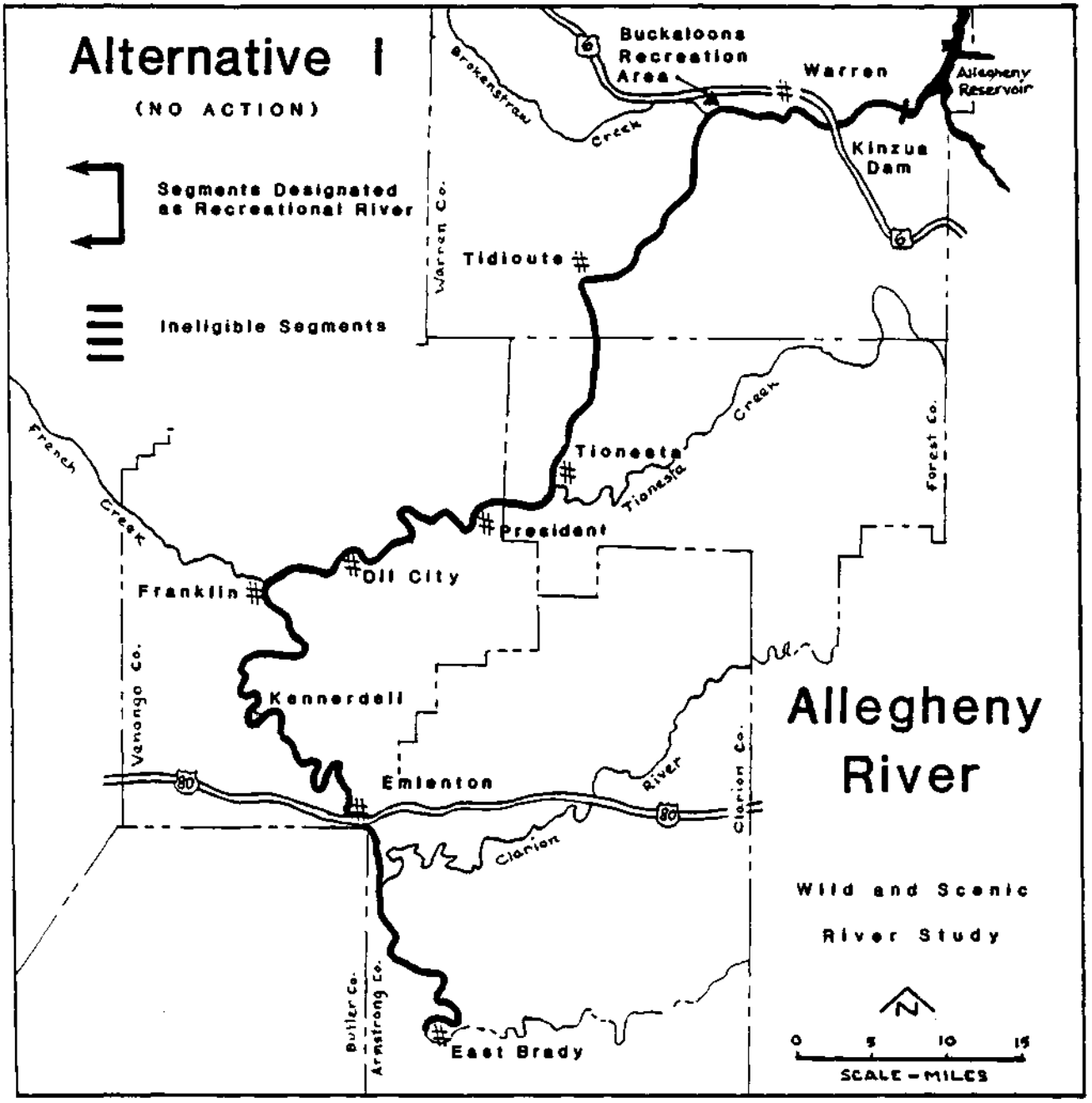


Figure 2-B - Map of Alternative II

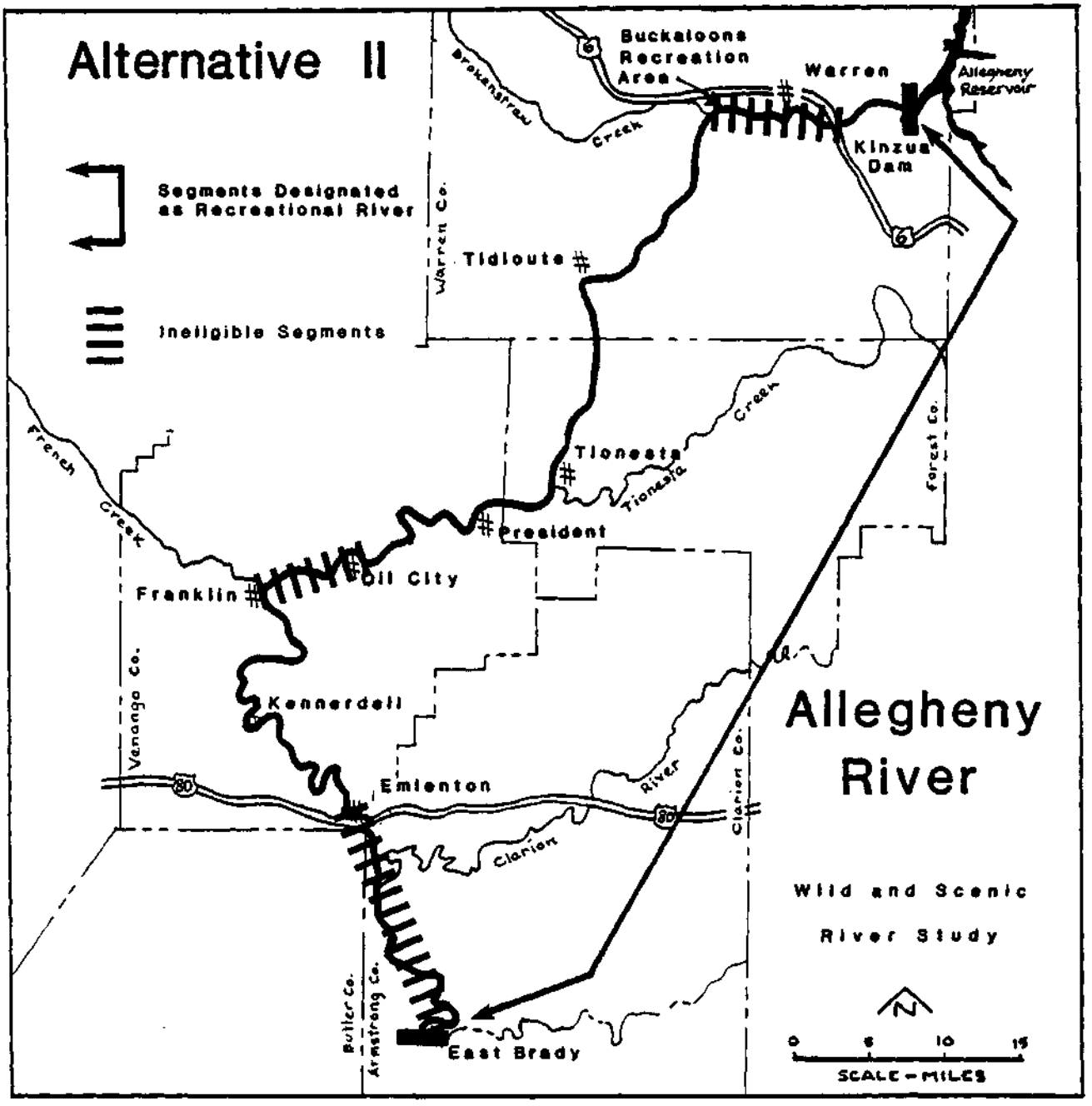


Figure 2-C - Map of Alternative III

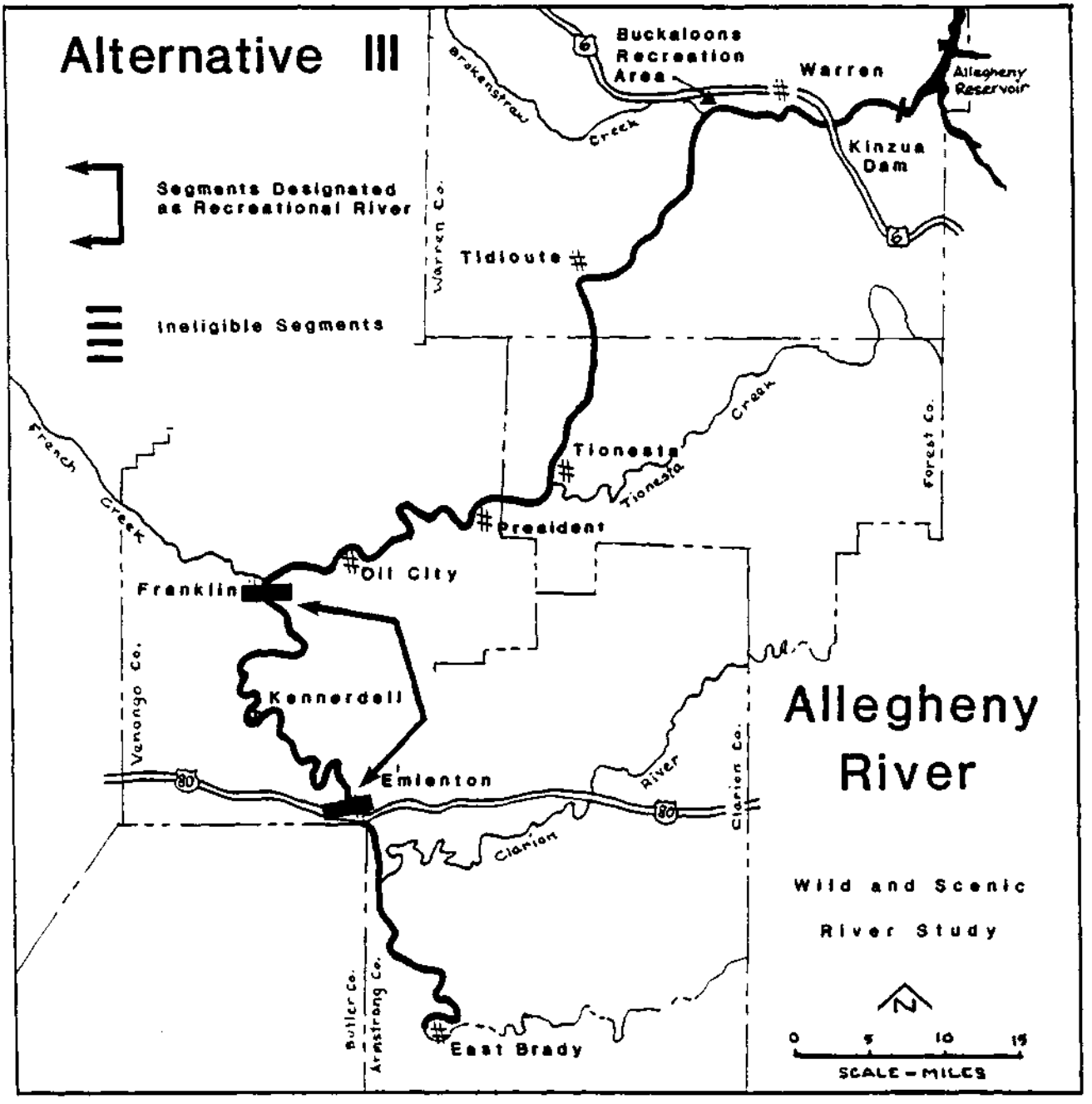


Figure 2-D - Map of Alternative IV

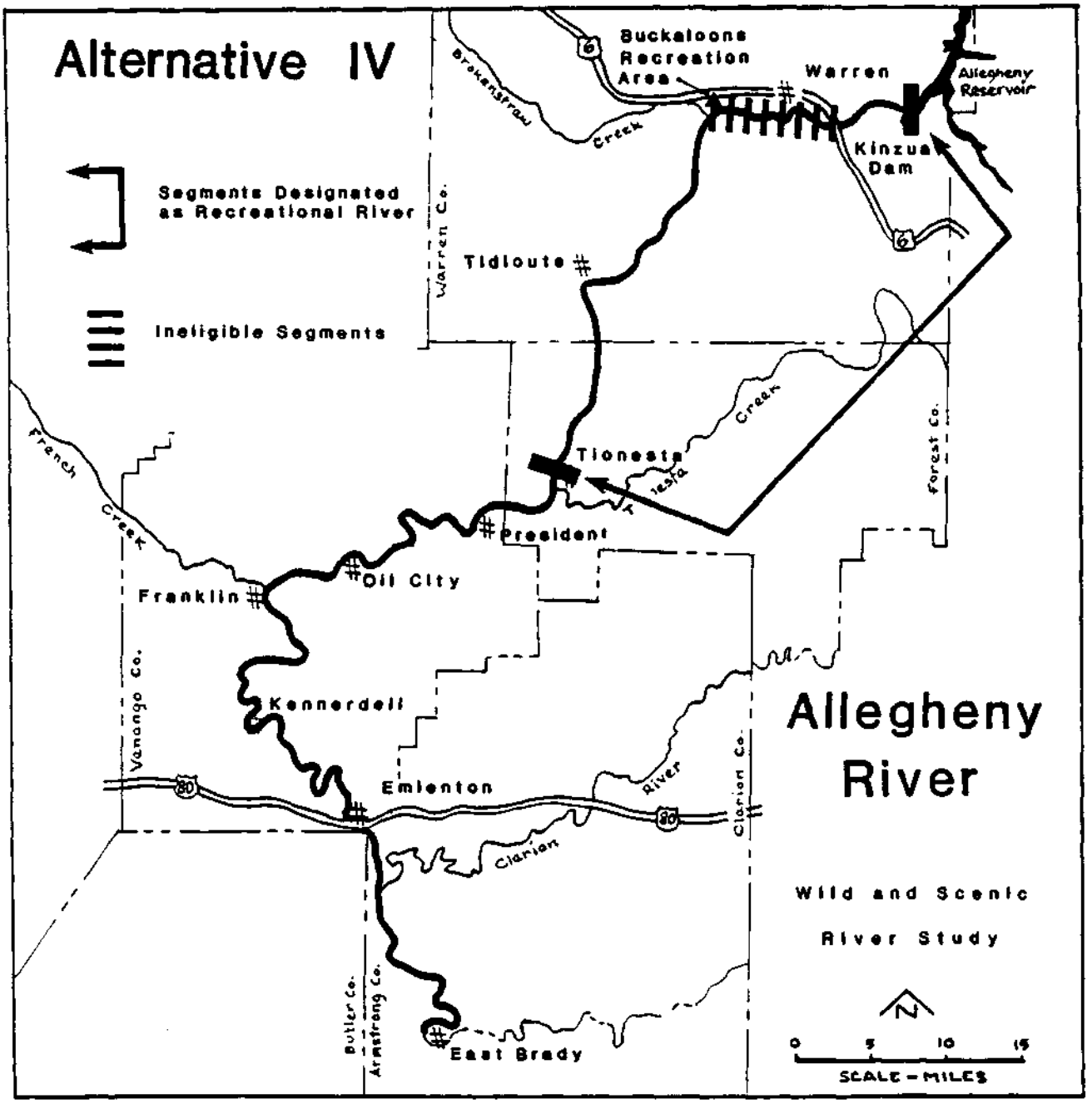
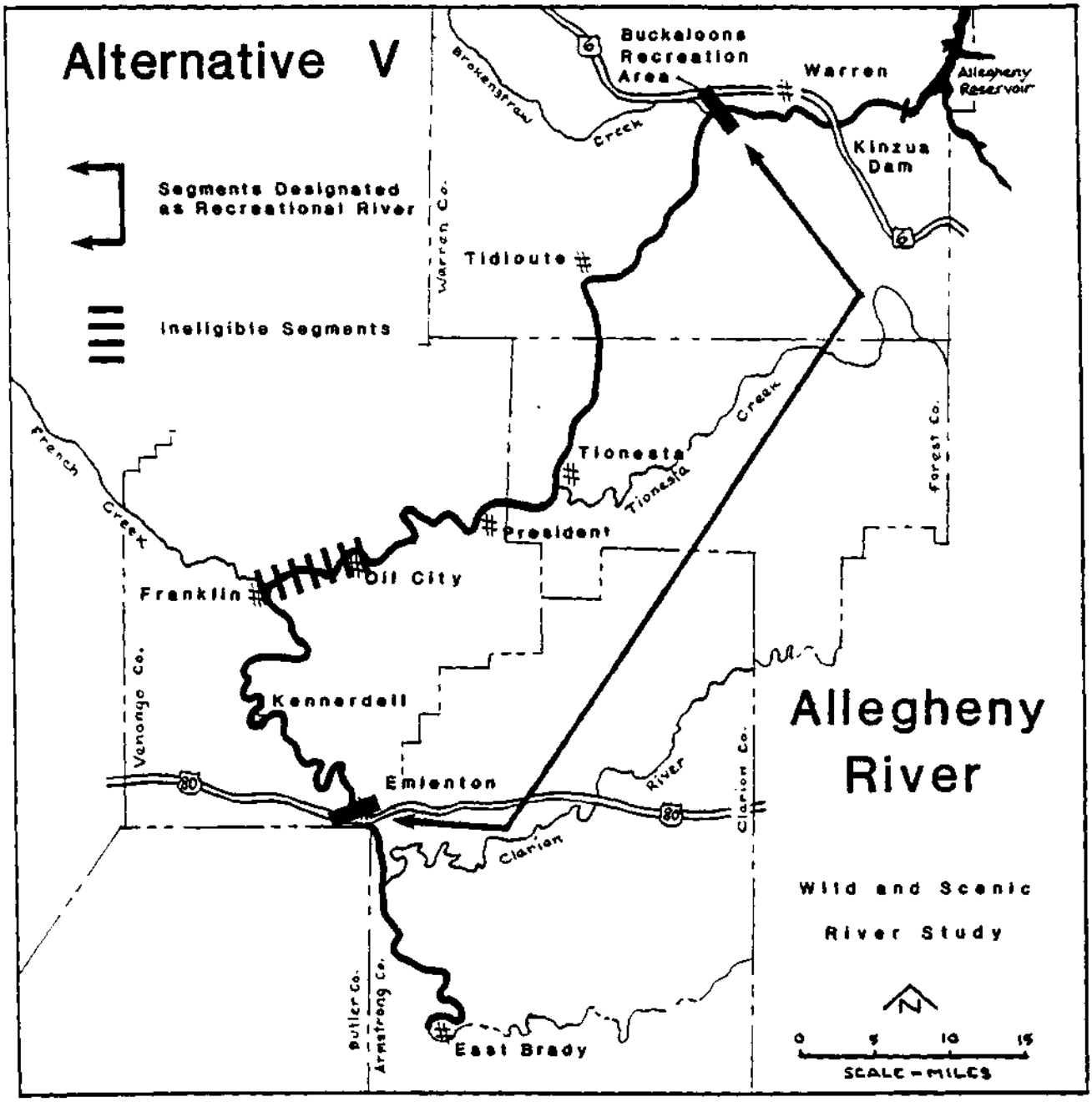


Figure 2-E - Map of Alternative V



This alternative currently contains 4,579 acres of public land consisting of National Forest, Pennsylvania DER, and Pennsylvania Game Commission lands. Public ownership would increase to about 5,059 acres, or 20 percent of the river corridor, as a result of designation.

No Threatened or Endangered plant, wildlife, or fish species (federal lists) are known to reside on lands included in this alternative.

B. ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

The following alternatives were also considered in the analysis but later dropped from further study:

Alternative Considered based on Administering Agency Options

The option of designating Alternatives II and V through an Act of Congress and assigning direct responsibility to the USDA Forest Service as the federal managing agency was considered and dropped. The rationale for this decision was three-fold:

1. The majority of the river corridor lies outside the Allegheny National Forest Proclamation Boundary and would require legislative readjustment to allow for necessary management activities.

2. The majority of the river corridor is currently in private ownership and represents numerous diversified public and private interests.

3. The USDA Forest Service lacks the necessary regulatory authority to limit development on private lands. Given the large amount of land now in private ownership, widespread acquisition of these rights is not feasible. This leaves existing State and local regulatory authority as the cornerstone for development of any management plan.

   Alternatives II and V were formulated to reflect management under State and local initiative because these governments possess the necessary regulatory authority to limit development on private lands. They also are in close contact with affected members of the public, and therefore are better able to provide for a level and quality of development suitable to protect river values.

Alternatives Considered Based on Length and Location Options

1. Designation of all eligible sections from Franklin to Kennerdell as "Recreational" river. This alternative included 14.3 miles of river and was dropped because:

a. It cuts in half a larger section of river (Franklin to Emlenton) displaying a similar set of river characteristics and scenic quality;

b. The longer segment, represented in Alternative III, is more efficient to manage.

2. Designation of all eligible sections from Buckaloons to Tidioute (east end of Courson Island) as "Recreational" river. This alternative included 13.2 miles of river and was dropped for the same basic reasons as discussed above under item 1. It's too short to allow for overnight river trips, and it breaks in half a longer section of river displaying similar river characterics.

C. MANAGEMENT GUIDELINES COMMON TO ALL ALTERNATIVES

Management guidelines were developed to protect those values for which the river was designated. They also provide limits within which management practices will be carried out so as to mitigate any adverse environmental effects.

These guidelines were developed through interpretation of the management principles defined in Section III of the Secretary of Agriculture's Wild and Scenic Rivers Implementing Regulations. They represent assumptions as to how management of the river would occur in the future and are meant to supplement, not replace, the management principles identified in the Implementing Regulations. While not binding on future managers, these guidelines will serve as a starting point in development of a management plan for those sections of river included within the National Wild and Scenic Rivers System. For additional information, see page 17 of the Allegheny River Study Report.

The following guidelines are compatible with the Standards and Guidelines listed in the Allegheny National Forest Land and Resource Management Plan. In addition, all actions taken on National Forest lands are subject to these same Forest Plan Standards and Guidelines, and the mitigation measures contained therein.

A discussion of the resulting effects from implementing the management guidelines is presented in Chapter IV of this EIS.

Management Guidelines Common to All Eligible River Sections

As stated above, the purpose of these guidelines is to protect those values for which the river was designated. These values are defined on pages 5-8 of the River Study Report and include these items:

1. Scenic quality;
2. Recreational and ecological values associated with the river islands;
3. Cultural values;
4. Free-flowing character;
5. Water quality; and
6. Sufficient river flow to provide for a wide range of recreation opportunities.
7. Maintain the river's "Recreational" classification.

In the section that follows, the river's values are identified as Management Goals. Subordinate to these values are the following:

1. A set of Management Objectives define these values in terms of existing river characteristics.
2. A set of Management Guidelines indicate what actions must be carried out to meet these objectives.

MANAGEMENT GOAL #1 - Maintain the Allegheny River's *Scenic Quality* as defined on pages R-5 through R-7 of the River Study Report.

In the following descriptions, scenic quality is described in terms of three distinct landscapes. Management objectives and guidelines are stated for each landscape, and apply to the entire river corridor unless otherwise indicated. See Figures 2-F and 2-G for pictorials on each landscape.

The overall visual management objectives (across all landscapes) are these:

a. Maintain the general flavor and character of each landscape in a way that minimizes impacts on other uses.
b. Guide or mold the changes that will occur on private lands so that the designated sections do not fall below the standards used for classification.

In general, Landscapes 1 and 2 are interspersed throughout the sections of river between Kinzua Dam and Oil City. Landscape 3 occurs in the stretch between Franklin and Emlenton.

Landscape 1 - Broad Valleys with Pastoral/Rural Scenes

Management Objectives for Landscape 1

(1) Retain pastoral/rural flavor. Discourage industrial or large commercial development from dominating views from the river.
(2) Maintain continuous forest canopy on at least 65 percent of the steep hillsides within the river corridor.

Management Guidelines for Landscape 1

(1) *Small Structures (such as a common family dwelling)* - Such structures are a common part of this scene. No significant mitigation measures are necessary, except as may be applied by local government through zoning ordinances.

(2) *Large Structures* - Screen new permanent facilities within 600 feet of shoreline with vegetation.

(3) *Oil and Gas Operations* - Screen new permanent facilities with vegetation.

(4) *Timber Management* - Screen all roads and landings with native vegetation. Blend openings seen from the river with existing terrain and vegetative patterns.

(5) *Sand, Gravel and Coal Operations* - Screen new permanent facilities and operations with vegetation.

Landscape 2 - Narrow Valleys with Natural Appearing Islands

Management Objectives for Landscape 2

(1) Maintain the vegetation and undeveloped character of the islands.
(2) Maintain natural appearance of the vegetation within 600 feet of shoreline.
(3) Maintain a continuous forest canopy over 90% of the immediate shoreline and 65% of the hillside areas.

Management Guidelines for Landscape 2

(1) *Structures* - Screen new permanent facilities located within 600 feet of the shoreline with native vegetation. Establish setback of 100 feet for new shoreline facilities. Permit no additional development on islands.

(2) *Oil and Gas Operations* - Screen new permanent facilities with native vegetation. Establish setback of 100 feet for new shoreline facilities. Prohibit surface occupancy on islands.

(3) *Timber Management* - Screen roads and landings with native vegetation. Make openings seen from the river blend with existing terrain and vegetative patterns. Allow no additional development on islands.

(4) *Sand, Gravel and Coal Operations* - Establish setback of 100 feet for new shoreline facilities. Screen new permanent facilities and operations with native vegetation. Allow no additional development on islands.

Landscape 3 - Narrow, Sharply Winding Valley with Steep Sideslopes

Management Objectives for Landscape 3

(1) Protect river bends and steep slopes from being destroyed by dredging, channeling, surface mining pits, etc.
(2) Protect existing vegetation along the shoreline and at critical focal points to retain a natural appearance.
(3) Subordinate evidence of development in the general landscape. Maintain a continuous forest canopy over 95 percent of the immediate shoreline and 80 percent of the forested hillsides seen from the river.

Management Guidelines for Landscape 3

(1) *Structures* - Screen new permanent facilities with native vegetation. Establish setback of 300 feet for new shoreline facilities.

(2) *Oil and Gas Operations* - Screen new permanent facilities with native vegetation. Establish setback of 300 feet for new shoreline facilities.

(3) *Timber Management* - Within 300 feet of shoreline, use single tree selection. In the area seen from the river, keep openings small and blend activity into existing terrain and vegetative patterns.

(4) *Sand, Gravel and Coal Operations* - Screen new permanent facilities with native vegetation. Establish setback of 300 feet for new shoreline facilities and operations. Prohibit coal strip mining from river study corridor (consistent with current federal law, see page R-22 for details).

Figure 2-F - Typical Section of Landscape Scenes 1 and 2

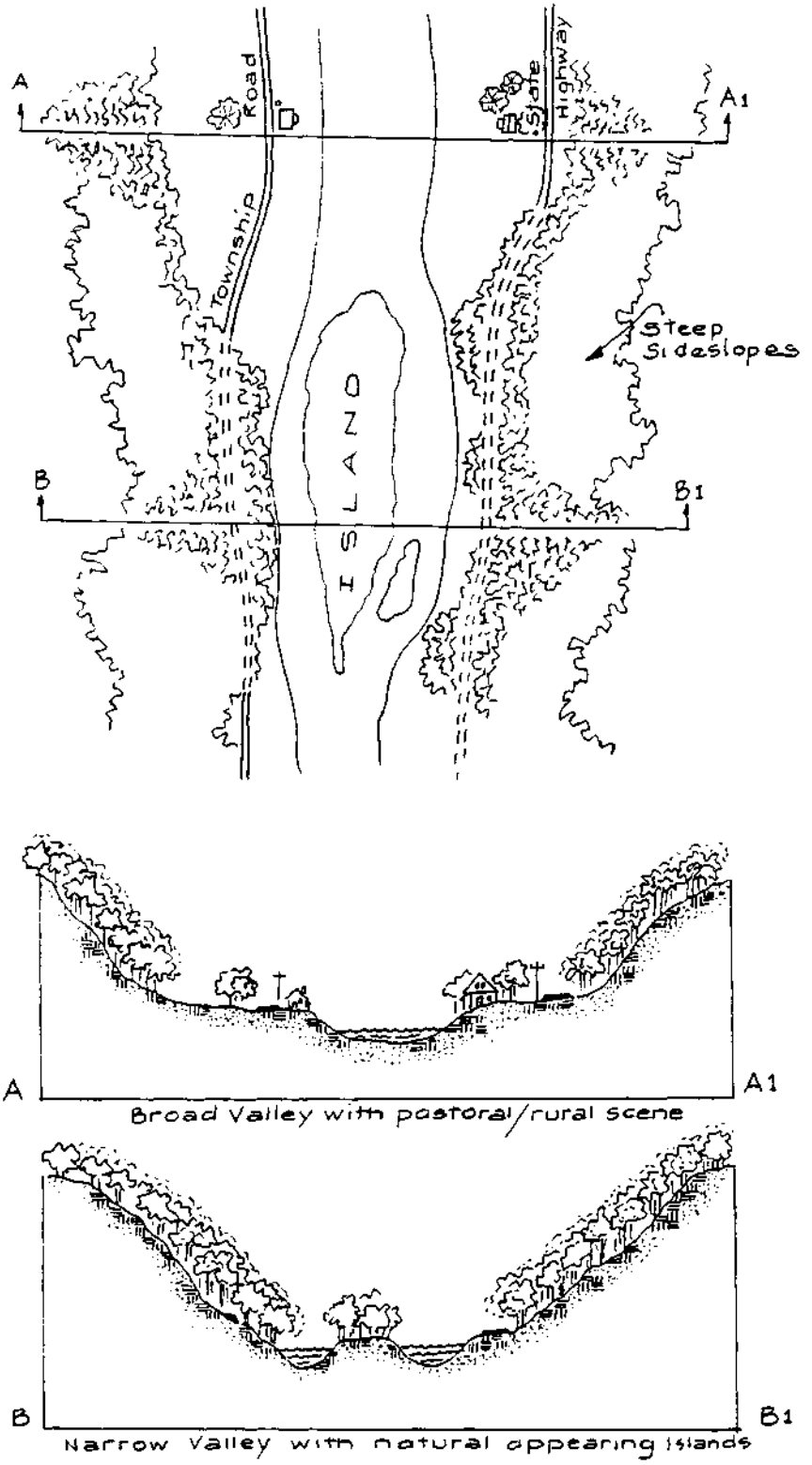
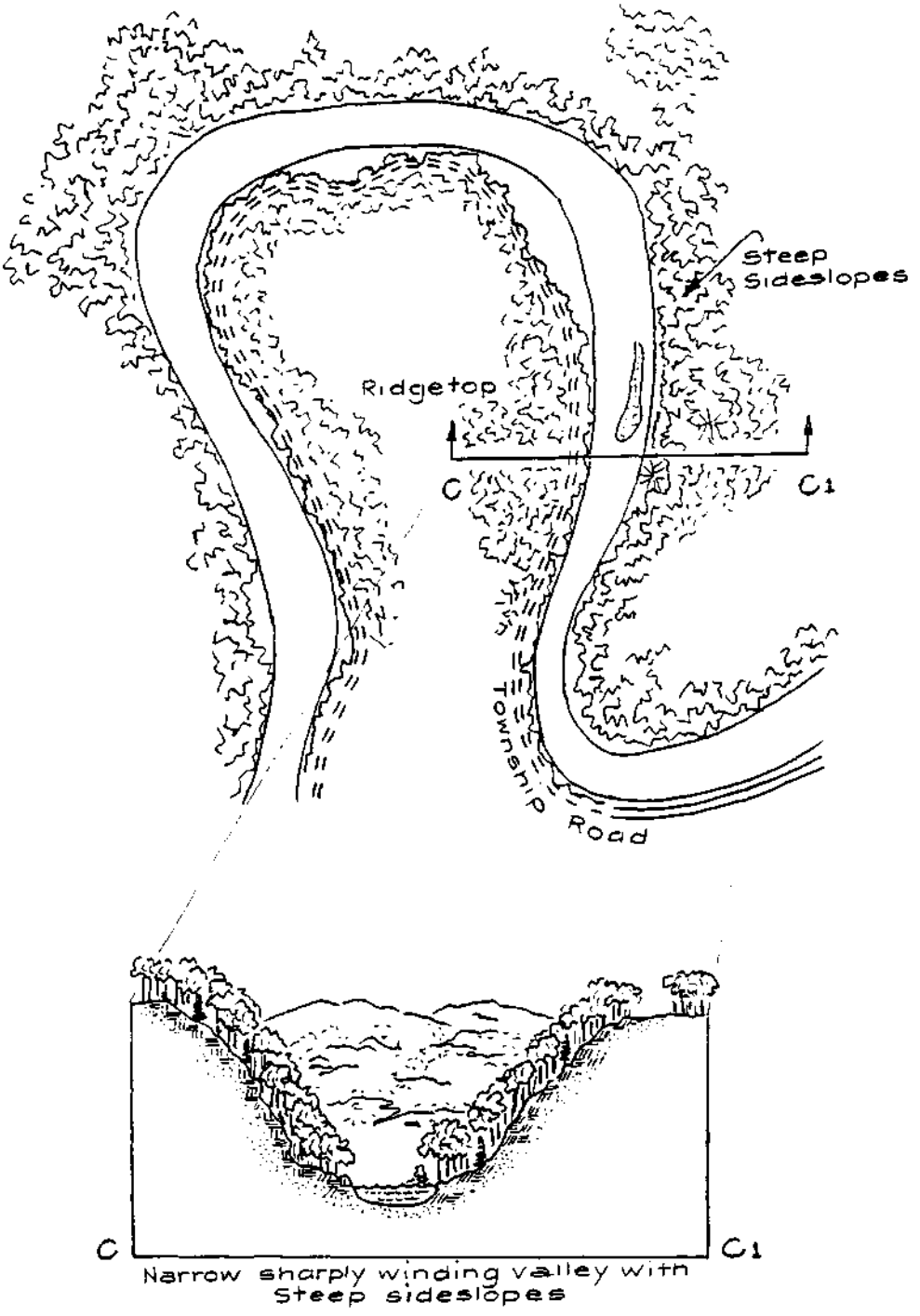


Figure 2-G - Typical Section of Landscape Scene 3



MANAGEMENT GOAL #2 - Preserve the scenic, *recreational, and ecological values associated with the river islands.*

Management Objectives

Maintain the existing natural character and riverine vegetation of the islands.

Management Guideline

Stop all new permanent development and prohibit resource extraction where surface occupancy is involved.

MANAGEMENT GOAL #3 - Protect existing outstandingly remarkable *cultural resource values.*

Management Objectives

Maintain the existing condition of the "Indian God Rock".

Management Guideline

No action is planned because we expect no change in user behavior as a result of designation.

MANAGEMENT GOAL #4 - Preserve the existing *free-flowing character* of the Allegheny River.

Management Objectives

Prohibit development of any new obstructions that would affect the river's free-flowing character.

Management Guideline

Through the current U.S. Army Corps of Engineers and Pennsylvania Department of Environmental Resources (PA DER) permit systems, prevent construction of new facilities which would adversely affect the river's free-flowing character.

MANAGEMENT GOAL #5 - Protect or enhance the *water quality* of the Allegheny River.

Management Objectives

Maintain water quality levels at or above the minimum levels set by federal and State statutes.

Management Guideline

No action needed. The PA DER is actively monitoring the Allegheny's existing water quality. State statutes provide sufficient authority for them to act if problems are identified.

MANAGEMENT GOAL #6 - Maintain sufficient water flow to provide for a wide range of recreation opportunities.

Management Objectives

Maintain water flow levels at or above the minimum flow rates necessary for water-oriented recreation.

Management Guideline

No action needed. Based on the historical water flow data presented on page 8 of the River Study Report, the minimum water flow requirements for existing water-oriented recreation activities would be maintained without the need for further action.

MANAGEMENT GOAL #7 - Maintain the Allegheny River's qualifications for *classification as a "Recreational" river.*

Management Objectives

Maintain future development and access within the river corridor to a level commensurate with the classification guidelines contained in the Secretary of Agriculture's Wild and Scenic Rivers Implementing Regulations.

Management Guideline

No action necessary. Compliance with the above management goals, objectives, and guidelines will maintain the river's current classification.

Table R-3 of the River Study Report lists the general criteria used in classifying the river. Since all eligible rivers must be classified as either "Wild", "Scenic", or "Recreational", and the "Recreational" classification allows for the most development, a river so classified may not change classes unless one of two situations arise:

(1) The river management plan improves existing conditions so much that portions of the river can be reclassified as "Scenic".

(2) Conditions deteriorate to a point where the river's outstandingly remarkable values no longer exist.

The Management Guidelines stated above under Management Goals 1-6 are designed to maintain the river's classification and protect its outstandingly remarkable values. Therefore, compliance with them will maintain the rivers "Recreational" classification.

D. COMPARISON OF ALTERNATIVES

This section provides a comparative summary of how the alternatives respond to Issues, Concerns and Opportunities (ICOs), and the resulting effects of designating parts or all of the eligible river sections within the National Wild and Scenic Rivers System.

Table 2-2 illustrates what changes in the existing management situation can be expected from designating eligible river sections into the National Wild and Scenic Rivers System. Since Alternative I represents a continuation of the current management situation, there are no values assigned in Table 2-2. A detailed discussion of all of the effects associated with designating or not designating portions of the river is contained in Chapter 4 of this EIS.

Table 2-2: ALTERNATIVE RESPONSE TO ICOs

ISSUES, CONCERNS AND OPPORTUNITIES (ICOs) CRITERIA	*UNIT OF MEAS**	*ALT I*	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
ICO #1 - RECREATION						
Recreational Use in River Corridor						
-- Existing Use	MRVD	143.8	143.8	143.8	143.8	143.8
-- Projected changes in Use	MRVD	0	43.1	10.5	25.7	39.9
New recreation facilities						
-- Boat launch/parking areas	#	0	3	2	0	3
ICO #2 - COST EFFICIENCY AND EFFECTIVENESS						
Discounted Benefits over 20 years						
-- Increased Recreational Use	M$	0	5,404	1,314	3,213	5,007
Discounted Costs over 20 years						
-- Recreation Construction Costs	M$	0	252	172	0	252
-- Land Acquisition Costs	M$	0	742	669	37	730
-- Annual Adminstration Costs	M$	0	3,548	1,300	1,385	3,251
-- Cost of Acquiring Subsurface Mineral Rights on islands.	M$	0	61	5	37	49
Benefit/Cost Ratio	Index	0	1.17	.61	2.2	1.17
Present Net Value (PNV)	M$	0	+ 801	- 832	+1,754	+ 725
Effects on Regional Economy						
-- New jobs created	Jobs	0	28	7	17	26
-- Annual flow of dollars into Regional Economy	M$	0	315	77	188	292
ICO #3 - MANAGING AGENCY	--	Local/ State Initi- ative	Local/ State Initi- ative	Local/ State Initi- ative	Forest Ser- vice	Local/ State Initi- ative
ICO #4 - PRIVATE DEVELOPMENT RIGHTS: RESOURCE MANAGEMENT & COMMERCIAL DEVELOPMENT						
Private Lands within Sensitive Visual Zones (SVZ)						
-- Already Developed	Acres	N/A	624	474	116	617
-- Too Steep or Narrow to develop	Acres	N/A	3,154	2,993	96	3,130
-- Developable Lands	Acres	N/A	666	534	98	653
-- Islands	Acres	N/A	680	56	392	641

* UNITS OF MEASURE: M$ = Thousands of Dollars; MRVD = Thousands or Recreation Visitor Days (annual). One RVD = one person spending 12 hours, or equal combination (i.e., two persons spending six hours each, etc.); # = Number of unit mentioned in column 1.

Table 2-2: ALTERNATIVE RESPONSE TO ICOs *(page 2)*

ISSUES, CONCERNS AND OPPORTUNITIES (ICOs) CRITERIA	*UNIT OF MEAS**	*ALT I*	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
ICO #4 - PRIVATE DEVELOPMENT RIGHTS: RESOURCE MANAGEMENT AND COMMERCIAL DEVELOPMENT (continued)						
Islands and Developable SVZ Lands Where Private Development Would be Constrained Through:						
-- Local Land Use Regulations	Acres	N/A	632	188	294	600
-- Scenic Easements	Acres	N/A	214	214	0	214
-- Fee Title Purchase:						
-- Surface	Acres	N/A	500	188	196	480
-- Subsurface	Acres	N/A	680	56	392	641
Resource value foregone as a result of constraints on income producing activities.						
-- Oil and Gas Production/Sand and Gravel Extraction	M$	0	170	14	98	160
-- Timber Management	M$	0	0	0	0	0
-- Agriculture	M$	0	0	0	0	0
-- Coal Strip mining	M$	0	0	0	0	0
ICO #5 - PRIVATE DEVELOPMENT RIGHTS: RESIDENTIAL DEVELOPMENT						
-- Land area where private property rights are constrained (Islands and critical visual areas).	Acres	**	**	**	**	**
ICO #6 - EASE OF MANAGEMENT						
Public Ownership						
Current Situation:						
-- Public ownership acreage	Acres	N/A	5,374	992	3,773	4,579
-- % of public ownership	%	N/A	20	10	36	18
After Designation:						
-- Public ownership acreage	Acres	N/A	5,874	1,180	3,969	5,059
-- % of public ownership	%	N/A	22	12	37	20
Public Land Management Agencies Involved	#	0	6	3	5	6
Complexity of Management - Number of Counties, Townships, and Small Towns/Boroughs Involved	#	0	55	17	26	50

* UNITS OF MEASURE: M$ = Thousands of Dollars; MRVD = Thousands or Recreation Visitor Days (annual). One RVD = one person spending 12 hours, or equal combination (i.e., two persons spending six hours each, etc.); # = Number of unit mentioned in column 1.

** Included above under the heading "Islands and Developable SVZ Lands Where Private Development Would Be Constrained Through: ...."

Table 2-2: ALTERNATIVE RESPONSE TO ICOs *(page 3)*

ISSUES, CONCERNS AND OPPORTUNITIES (ICOs) CRITERIA	*UNIT OF MEAS**	*ALT I*	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
ICO #7 - THREATENED AND ENDANGERED WILDLIFE, FISH AND PLANTS						
-- Currently occupied habitat	Acres	N/A	0	0	0	0
ICO #8 - CULTURAL RESOURCES						
Known sites	#	N/A	75	41	11	75
Sites on National Register	#	N/A	1	1	0	1
ICO #9 - PROTECTION OF RIVER'S WATER QUALITY, FREE-FLOWING CHARACTER, AND OUT- STANDINGLY REMARKABLE VALUES						
Water quality protected	Yes/No	Yes	Yes	Yes	Yes	Yes
Free-flowing character protected	% of River	0	100	37	39	92
Outstandingly remarkable values protected	--	Wilderness Islnds	Islnds, Scenic, IGR**	Scenic, Indian God	Islnds	Islnds, Scenic, IGR*
Adequacy of State/Local Regulations to Protect River Values (Percentage of Sensitive Visual Zones Where River Values are Already Protected Under Current Land Use Regulations)						
-- Local Zoning	%	N/A	42	7	100	42
-- Flood Plain/Sewage Permit Regulations	%	N/A	50	20	80	52
-- Erosion/Sedimentation Control Regulations	%	N/A	100	100	100	100
-- Dam Safety and Waterway Management Regulations						
(a) Permits required for Structures on River	%	N/A	100	100	100	100
(b) Special Protection Regulations that apply only to a designated river (see pg 3-19 and table on 3-20 ==)	%	N/A	63	17	90	63

* UNITS OF MEASURE: M$ = Thousands of Dollars; MRVD = Thousands or Recreation Visitor Days (annual). One RVD = one person spending 12 hours, or equal combination (i.e., two persons spending six hours each, etc.); # = Number of unit mentioned in column 1.

** Indian God Rock, listed in the National Register of Historic Landmarks.

CHAPTER III - AFFECTED ENVIRONMENT

Chapter III profiles the existing environment of the Allegheny River, including its physical, biological, social, and economic features. Features described would be affected if any of the alternatives were implemented. Information presented in this chapter is the baseline against which readers can measure or evaluate the environmental consequences analyzed in Chapter IV.

The chapter contains the following sections and subsections:

A. PHYSICAL ENVIRONMENT

1. Soil and Landform
2. Energy Minerals
3. Sand and Gravel
4. Visual Resources
5. Cultural Resources
6. Water Quality
7. Noise

B. BIOLOGICAL ENVIRONMENT

1. Vegetation
2. Wildlife, Fish, Threatened and Endangered Species
3. Recreation Opportunities
4. Wilderness, Research Natural Areas, National Recreation Areas

C. SOCIAL AND ECONOMIC ENVIRONMENT

1. Plans and Programs of Other Agencies
2. Private Property Rights
3. Social and Economic Conditions

A. PHYSICAL ENVIRONMENT

1. *SOIL AND LANDFORM*

The Allegheny River is located in an unglaciated area known as the Allegheny High Plateau. Over geologic time, the Allegheny River has cut a deep, V-shaped valley into this plateau. It flows from its origins in Potter County, PA, northwest through a small portion of New York State, and then swings back down through northwestern Pennsylvania, converging with the Monongahela River at Pittsburgh to form the Ohio River. The river drops a total of 395 feet in elevation over the 128 mile study corridor.

The river flows in a relatively straight course through the upstream areas. As it nears Oil City, it begins to form long sweeping bends which characterize its downstream patterns. Many small streams flow into the river in the 128-mile study section. There are only six major tributaries -- the Conewango, Brokenstraw, Tionesta, Oil, and French Creeks, and the Clarion River.

The river has carved a valley out of layers of sedimentary material. In the narrower portions of the valley, the river is 400-600 feet wide; in the broader portions, it's about 1,000 feet wide. During the ice age the advance of continental glaciers stopped near this stretch of river. Melt waters from the glaciers deposited sands and gravels along the river bottoms.

The lower elevation soils were formed from fine to coarse textured materials. These materials were derived from alluvial, glacial or colluvial sources which had accumulated within the valley floors. Soils on the ridges and sideslopes are fine textured and derived from residual materials.

The shoreline consists mainly of steep hillsides that rise from the river. The steep slopes are interspersed with flat areas that occur on straight stretches, at confluences with other streams, and on the inside of bends. Most of the development is located on these "flats".

Portions of the river contain tree covered islands and steep forested hills extending to the water's edge, thus retaining the wild serene beauty it had when only the Seneca Indians canoed its waters.

2. *ENERGY MINERALS*

Oil and gas resources have been produced in every segment of the river study corridor since the original oil boom in the 1860s. The latest Oil and Gas Field Map (1982) compiled by the PA DER shows producing reserves under almost all of the river corridor. The area with the least

reserves shown, located between Buckaloons and Tidioute, is ironically the area where the most drilling is taking place. Because many (often unknown) variables determine where exploration and production are undertaken, it is difficult to predict future activity.

Historically, oil and gas development has not impacted visual and water resources to an extent that precludes eligibility or changes river classification under the Wild and Scenic Rivers Act.

Development for oil and gas is sporadically located from Kinzua Dam to Tidioute. One extensive development is located on the east side of the river just below Franklin. Although the reserves in the river corridor are similar to those located on the plateau, the level of development along the river has been much lower in recent years for these reasons:

a. Recent State legislation has created stricter water quality standards and associated drilling requirements.
b. The steep slopes and proximity to surface waters in the corridor make much of the acreage along the river costly to develop.
c. Readily developable land in the corridor is often already devoted to camps, residences, and highways.

Two commercial coal seams, Brookville and Mercer, are located within the river study corridor south of Emlenton. Since the river segments south of Emlenton are not eligible for designation, these coal reserves are not affected by any of the alternatives.

3. *SAND AND GRAVEL*

Sand and gravel aggregates, deposited by glacial meltwaters, have been mined in the river corridor since the river valley became inhabitated. This has resulted in the removal of about 5 percent of the river bottom gravel resources.

In 1972, the PA DER issued new guidelines for the removal of aggregate material from the Allegheny River. These restrictions caused the abandonment of five dredges which were operating on the river north of East Brady: one each at Franklin, Tionesta, and Tidioute, and two at Warren. At that time, these dredges supplied nearly all of the quality aggregate material used by Pennsylvania Department of Transportation (PennDOT) and over 85 percent of the aggregate used in the region.

Gravel companies have now located other sources, but these deposits are generally of poorer quality than the naturally washed and sorted gravels found in the riverbed. As a result, production costs for developing, washing, crushing, and sorting these gravels are much higher than those associated with dredging. Average gravel costs have more than doubled since 1972.

There are currently two active pits operating within eligible sections of the river corridor. one each at Tidioute and West Hickory. The known gravel

TABLE 3-1: GRAVEL PITS

LOCATION	*OWNER*	*SIZE*	*CONDITION*
Tidioute	Tionesta S&G	50A	Active
Tidioute	Tionesta S&G	60A	1/2 reclaimed, 1/2 used for storage, processing
Tidioute	Tionesta S&G	50A	Inactive and reclaimed
E. Hickory	Kuntz	65A	15A active; not reclaimed
W. Hickory	Unknown	unk	Reclaimed to fields
W. Hickory	Tionesta S&G	10A	Inactive; reclaimed
W. Hickory	Tionesta S&G	10A	Active
Holeman	Unknown	4A	Inactive; not reclaimed
President	Unknown	4A	Inactive; not reclaimed
Kennerdell	Unknown	2A	Inactive; not reclaimed

Future quality aggregate supplies in the region are limited to the resources along the river.

4. *VISUAL RESOURCES*

Erosion of the Allegheny Plateau formed the present Allegheny River valley. Deep valleys with steep forested sideslopes enclosing a sinuous river typify the landscape.

The Allegheny River's scenic qualities differ little from rivers of similar size in this region (Susquehanna, Upper Deleware). Farm fields, small communities, and summer camps dot the broad valleys, giving rural, pastoral, or sylvan settings. In the narrower valleys, steep wooded banks subdue the evidence of man, giving a taste of isolation and wildness.

Seen from the river, three different landscape characters exist.

a. *Landscape 1: Broad Valleys with Pastoral/Rural Scenes*
A broad river valley characterized by a wide river with slow eddies, and having a distinctly pastoral landscape consisting of farmland, rural settlements, rustic cabins, and river towns.

b. *Landscape 2: Narrow Valley with Natural Appearing Islands*
A somewhat narrower river valley dotted with many islands which divide the normally wide river into smaller, faster-flowing channels. This gives the user an intimate experience with the river.

To anyone exploring the island channels, the quickly changing landscapes enhances the visual experience. Key features of this landscape are the apparent natural vegetation, undeveloped islands, and the surrounding river shorelines. These features suggest a more wild or natural setting than described under Landscape 1.

c. *Landscape 3: Narrow, Sharply Winding Valley with Steep Sideslopes*
An unusually narrow valley that has very steep slopes and bends so sharp they nearly turn back on themselves. This topography forms distinct focal landscapes with strong spatial enclosure, a feature very uncommon for rivers of this size and length.

This is also the least developed section of the entire Allegheny River. The steep slopes and narrow flood plains deter significant agricultural, commercial, residential, or community development. The forest canopy appears nearly continuous along the shoreline and at the focal points described above.

Landscapes 1 and 2 occur in those sections of river from Kinzua Dam to Oil City. The visual contrasts afforded by moving through pastoral landscape, then into a more natural island landscape -- all within the backdrop of steep forested hillsides -- form a unique scenic experience.

Below Franklin, river scenery and character change rather dramatically to the character described as Landscape 3. This section of river contains nine sharp bends, forming 17 distinct focal landscapes with strong spatial enclosure. From a regional perspective, this landscape is considered both unique and outstandingly remarkable.

Within these three landscapes, there exist certain lands which are critical to maintaining the river's visual resources. These lands are termed "critical visual areas", and their location with respect to the river corridor are referred to as the "sensitive visual zone." On the Allegheny River, critical visual areas include all of the river islands, shoreline areas and focal landscapes.

Table 3-2 summarizes the acreage of critical visual areas within eligible river segments. It also shows the relative development potential of these lands based on current technology and land use regulations. Figure 3-A illustrates the relative breakdown of these lands within the sensitive visual zone.

FIGURE 3-A: BREAKDOWN OF RIVER CORRIDOR'S SENSITIVE VISUAL ZONES (SVZ)

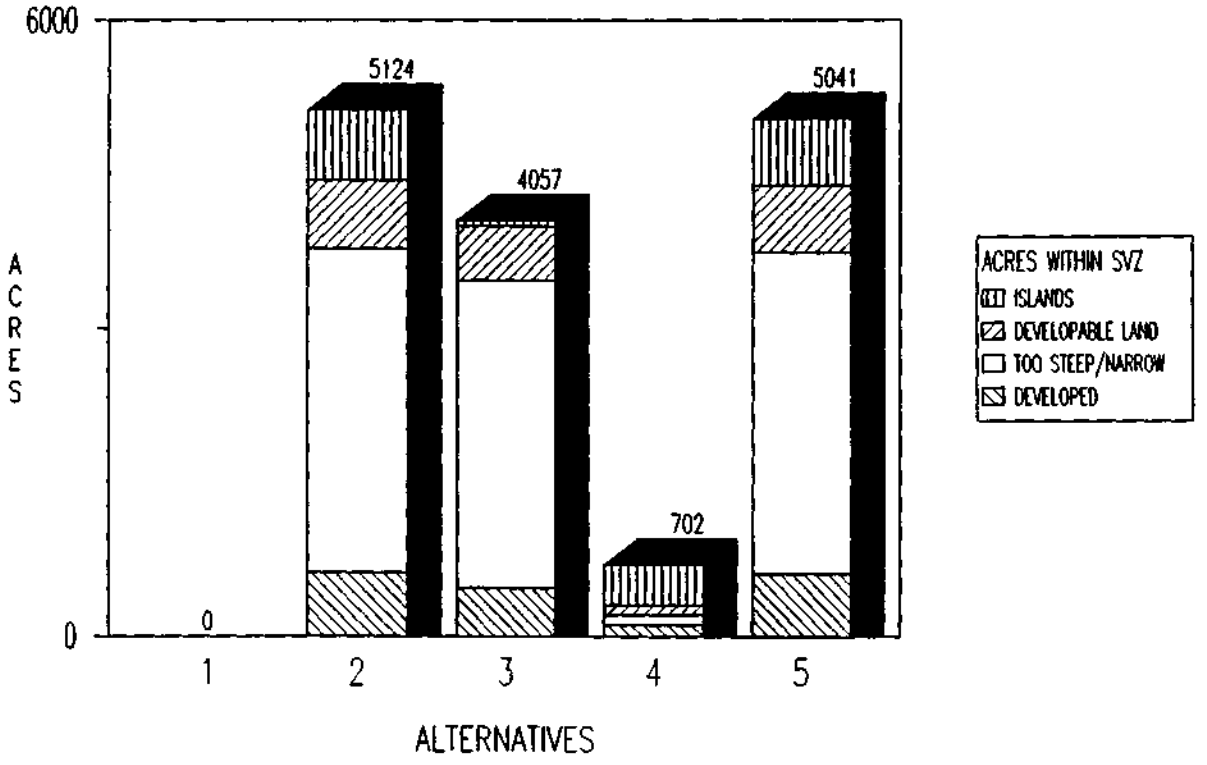


TABLE 3-2:
FUTURE DEVELOPMENT POTENTIAL OF CRITICAL VISUAL AREAS

KINZUA DAM TO WARREN (6.7 MILES)

*CRITICAL VISUAL AREAS BY RIVER SEGMENT ***	*LINEAL FEET*	*ACRES*	*% OF TOTAL SENSITIVE LANDS*	*% OF TOTAL STUDY CORRIDOR*
Study Corridor	--	2,144	--	100. %
100 Foot Shoreline (Landscape 2)	29,897	69	100%	3.2%
--Private Lands	19,007	44	64%	2.0%
----Currently Developed	3,168	7	10%	0.3%
----Too Steep/Narrow	10,349	24	35%	1.1%
----Developable	5,490	13	19%	0.6%
--Public Lands	10,890	25	36%	1.2%
----State	0	0	--	--
----National Forest	10,890	25	36%	1.2%
Islands *	--	83	100%	3.9%
--Private Lands	--	39	47%	1.8%
--Public Lands (All NF)	--	44	53%	2.1%

BUCKALOONS TO TIONESTA (26.5 MILES)

Study Corridor	--	8,480	--	100. %
100 Foot Shoreline (Landscape 2)	160,220	367	100%	4.3%
--Private Lands	115,988	266	72%	3.1%
----Currently Developed	47,514	109	30%	1.3%
----Too Steep/Narrow	31,342	72	19%	0.8%
----Developable	37,131	85	23%	1.0%
--Public Lands	44,232	101	28%	1.2%
----State	16,471	38	10%	0.4%
----National Forest	27,761	64	18%	0.8%
Islands *	--	705	100%	8.3%
--Private Lands	--	353	50%	4.2%
--Public Lands (All NF)	--	352	50%	4.1%

KINZUA DAM TO TIONESTA (33.2 MILES)

*CRITICAL VISUAL AREAS BY RIVER SEGMENT ***	*LINEAL FEET*	*ACRES*	*% OF TOTAL SENSITIVE LANDS*	*% OF TOTAL STUDY CORRIDOR*
Study Corridor	--	10,624	----	100. %
100 Foot Shoreline (Landscape 2)	190,117	436	100%	4.1%
--Private Lands	134,995	310	71%	2.9%
----Currently Developed	50,682	116	27%	1.1%
----Too Steep/Narrow	41,691	96	22%	0.9%
----Developable	42,622	98	22%	0.9%
--Public Lands	55,122	126	29%	1.2%
----State	16,471	38	9%	0.4%
----National Forest	38,651	89	20%	0.8%
Islands *	--	788	100%	7.4%
--Private Lands	--	392	50%	3.7%
--Public Lands (All NF)	--	396	50%	3.7%

TIONESTA TO OIL CITY (21 MILES)

Study Corridor	--	6,720	---	100. %
100 Foot Shoreline (Landscape 2)	57,997	133	100%	2.0%
--Private Lands	57,997	133	100%	2.0%
----Currently Developed	14,715	34	26%	0.5%
----Too Steep/Narrow	28,373	65	48%	1.0%
----Developable	14,715	34	26%	0.5%
--Public Lands (NF/State)	0	0	---	---
Islands (All Private) *	--	232	100%	3.5%

FRANKLIN TO EMLENTON (31.3 MILES)

CRITICAL VISUAL AREAS BY RIVER SEGMENT **	*LINEAL FEET*	*ACRES*	*% OF TOTAL SENSITIVE LANDS*	*% OF TOTAL STUDY CORRIDOR*
Study Corridor	--	10,016	---	100.
300 Foot Shoreline (Landscape 3)	330,528	2,276	100%	23. %
--Private Lands	296,898	2,044	90%	20. %
----Currently Developed	68,893	474	21%	4.7%
----Too Steep/Narrow	150,428	1,036	46%	10. %
----Developable	77,577	534	23%	5.3%
--Public Lands (All State)	33,630	232	10%	2.3%
Focal Landscape	--	2,242	100%	22. %
--Private Lands	--	1,957	87%	20. %
----Currently Developed	--	0	---	---
----Too Steep/Narrow	--	1957	87%	20. %
----Developable	--	0	---	---
--Public Lands (All State)	--	285	13%	2. %
Islands (All Private) *	--	56	100%	0.6%

** Access and existing State regulations should severely restrict the potential for future development of the islands.*

*** Definition of terminology used to describe the development potential:*

a. *Shoreline areas - The 100 or 300 foot shoreline acres refer to setback zones recommended for each landscape in Chapter II, Management Guidelines (pp. 2-15 through 2-23).*
b. *Currently Developed - Structures within 400 feet of shoreline.*
c. *Too Steep/Narrow - Slopes greater than 30 percent and less than 200 feet in width.*
d. *Developable - Remaining shoreline zone.*

5. *CULTURAL RESOURCES*

Various cultures and groups have used the Allegheny River for more than 12,000 years. They include Indian tribes, explorers, missionaries, loggers, settlers, and oil barons. The region's most intensive occupation and use, through both prehistoric and historic times, took place in the river valley, because the river provided the best transportation corridor.

Many Indian groups used the valley for travel, camps, hunting, villages, garden fields, and burial areas. Occasionally they used the nearby hills and plateaus. Many archaeological sites in the Allegheny Valley have revealed Indian artifacts, including tools, spears and arrowheads, ornaments, and pottery, as well as house, village, and mound sites. Numerous Indian sites have been located and recorded; there may be many others.

Settlement of the Allegheny River valley by Americans of European descent became intensive after 1800. Many traders, soldiers, missionaries, trappers, and pioneers used the area in the 1700s. The river provided transportation for the timber and oil industries, for settlers, agricultural products, and trade items. Populations built up and commerce developed along the river; people farmed the valleys. Barges and other river vehicles were important; later, railroads and trucks replaced them.

About 75 cultural resource sites have been identified and recorded within the qualifying segments of the river. Due to the extensive and continuous occupation and use of the river, many more sites have been built over, inadvertently demolished, or may yet be located. The occurrence of the sites by river segment is as follows:

River Segment	*Number of Sites*	*Number of miles*	*Sites per Mile*
Kinzua Dam - Warren	0	7	0
Buckaloons - Tionesta	11	26	0.4
Tionesta - Oil City	23	21	1.1
Franklin - Emlenton	41	31	1.3

Site density is higher on the lower sections of the river for two reasons: (1) the river valley is narrower in the south, which channeled the uses closer to the river; and (2) modern development is much less in the southern sections, so a greater number of sites remain.

One site, located in the Franklin-Emlenton segment, is called "Indian God Rock". This site is listed on the National Register of Historic Landmarks. It consists of a large rock on the east river bank and is noted for its many Indian pictographs (now mostly obliterated by erosion and vandalism).

6. *WATER QUALITY*

The Commonwealth of Pennsylvania designates the following beneficial uses for the Allegheny River:*

a. Aquatic Life - Warm water fishes.
b. Water Supply - For drinking, industrial uses, livestock, wildlife, and irrigation.
c. Recreation - Boating, fishing, water contact sports, aesthetics.

Based on these uses, a set of criteria for water quality characteristics of the river is established in Chapter 93 of the DER's Rules and Regulations.

The River's quality was evaluated in light of these standards in the State Water Plan.** This study concluded that water quality of the Upper Allegheny River is good except for localized reaches that may be degraded. Degradation is minimized, however, by dilution and the assimilative capacity of the river. In addition, the Commonwealth's biennial assessment of the quality of the State's waters indicates that 87 percent of the surface waters of the Upper Allegheny River Basin meet water quality standards.***

7. *NOISE*

Noise is prevalent in the river corridor from Kinzua Dam to just south of Tionesta. Here, PA 59 and U.S. 62 run closely parallel to the river's edge in many places. Noise from vehicular traffic (especially large trucks) is intrusive. River users can avoid much of the noise by traversing the river on the western side of the islands. The islands offer a sense of solitude by screening out highway sounds.

* *Title 25, Chapter 93, Section 93.4, Pennsylvania Code.*
** *The State Water Plan: Subbasins 14 and 16: Genesee River and Upper Allegheny River. Department of Environmental Resources, December 1980.*
*** Water Quality Inventory. Department of Environmental Resources. Publication No. 42, 1980.

Other sounds which come from the development along the river are random, transitory, and not adverse, since they are harmonious with the pastoral setting.

In the southern sections, noise is created from the motorized boats used for fishing and other recreation activities.

B. BIOLOGICAL ENVIRONMENT

1. *VEGETATION*

There are 20,058 acres of forested land (73 percent of area) in the river corridor. Mixed oak, the most common timber type, occupies nearly all of the southern and western exposures. Northern and Allegheny hardwoods are found on some eastern and northern exposures. Timber stands consisting of 50 percent or more hemlock can be found growing on both sides of the river on northern and eastern exposures. There are occasional pure stands of tulip poplar, usually located on abandoned agricultural land. Elm, aspen, sycamore, cottonwood, butternut, willow, silver maple, and alder predominate on the river banks and islands.

The islands are characterized by river bottom forest, containing many ages and sizes of trees, including virgin stands with specimens over four feet in diameter. Dense, herbaceous undergrowth also occurs, with very tall ferns.

There are no federally listed rare or endangered plants known to exist in the river corridor. The river environment does, however, offer suitable habitat for the small-whorled pagonia, (endangered plant, federal list), and several other rare plants including:

a. Flat-stemmed Spike Rush
b. Common Elephant Ear
c. Bicknell's Hoary Rockrose
d. Thread Rush
e. Rock Skullcap

On May 31, 1985, tornadoes knocked down most of the trees in two wide swaths near Tidioute and Tionesta. One of the hardest hit areas was Baker Island, a component of the Allegheny Islands Wilderness.

A portion of the river corridor is used for agriculture. Most of this land is located on the floodplains between Oil City and Buckaloons Recreation Area (USFS). Grazing, row crops (corn), and small grains (oats and some wheat) are the main agricultural products.

2. *WILDLIFE, FISH, AND THREATENED AND ENDANGERED SPECIES*

The Pennsylvania Fish and Wildlife Data Base lists 394 species of mammals, birds, amphibians, reptiles, and fish that are likely to occur between Kinzua Dam and Interstate 80. Of these species, 34 are designated on the State list of threatened, endangered or of special concern. This species list is available for public review at the Allegheny National Forest Supervisor's Office, 222 Liberty Street, Warren, PA 16365.

a. *Habitat*

Wildlife habitat within the river corridor has been greatly influenced by the extensive timber harvesting that occurred throughout the region during the late 1800s and early 1900s. Presently, 70 percent of the forested habitat consists of trees between 50 and 80 years old, resulting in large acreages of homogeneous habitat.

The river corridor is characterized by steep slopes with large expanses of deciduous hardwoods and a scattering of conifers. The hardwood species composition in the river corridor is distinctly different from the adjacent plateau. Red, white, and chestnut oak, and hickory are the dominant hardwoods, providing valuable mast for deer, bear, turkey, and squirrel.

Using the widely accepted classification of wetlands provided by the Fish and Wildlife Service (USDI), the Allegheny River corridor can be generally classified as a Riverine System, Upper Perennial Subsystem, Forested Wetland Class, Broad-Leaved Deciduous Subclass (Cowardin, et. al. 1979). The emergent wetland and scrub-shrub wetlands zones are narrow.

Several islands, ranging in size from 1/2 acre to 100 acres, contain stands of riverine hardwoods and many old farm fields. They provide nesting and loafing areas for ducks and geese, cavities for squirrels and raccoons, foraging areas for deer and turkeys, and nest trees for raptors and herons.

Fish habitat in the Allegheny River has been modified by the construction and operation of the Kinzua Dam. The first seven miles below the dam have been impacted by changes in water temperature and flow, resulting in a change toward cold water tolerant fish species.

Human disturbances, such as sand and gravel operations, roads, cottages, and permanent dwellings, have deteriorated the habitat

value in some areas. About 10 miles of the river are bordered by State Gamelands, which are managed primarily for wildlife and used extensively by hunters.

b. *Big Game*

White-tailed deer, black bear, and wild turkey are the three big game species found within the river corridor. Populations of all three species are stable or increasing. Benefits are provided by the oak and hickory mast. At the lower elevations, slopes often provide protection from harsh winter winds and receive less snow than adjacent ridgetops.

c. *Waterfowl and Shorebirds*

Large oak trees adjacent to meandering stretches of the river provide prime wood duck habitat. Two important habitat components for wood ducks are acorns, a common food item, and large hollow trees used for nesting. Other waterfowl observed on the River include buffleheads, canvasbacks, American coots, double breasted cormorants, black ducks, ring-necked ducks, ruddy ducks, gadwalls, several species of grebes and mergansers, mallards, and pintails.

Four species of herons, including the great blue heron (Species of Special Concern in Pennsylvania) inhabit the river corridor. Herons feed mainly on small fish and nest in "colonies" in the tops of large trees. Five species of sandpipers occur in the river corridor. Snow and Canada geese are often seen on the river during their fall migration.

d. *Small Game*

Several species of small game provide hunting opportunities. They include gray squirrel, ruffed grouse, American woodcock, eastern cottontail rabbit, mourning dove, and woodchuck.

e. *Non-Game*

At least seven species of hawk and eight species of owl occur in the river corridor. Many songbirds, including flycatchers, sparrows, warblers, and woodpeckers, provide optimum bird-watching opportunities.

f. *Threatened, Endangered, and Species of Special Concern*

The bald eagle is the only federally listed endangered species known to occur in the river corridor. During the winter, five to nine bald eagles are often seen roosting along the river and feeding on fish in the ice-free waters below the Kinzua Dam. Recently, bald eagles have been spotted during the summer, but no nests have been found. South of Franklin, the sharply winding valley with steep hillsides and few human intrusions offer high potential nesting habitat for bald eagles.

Several species of fresh water bivalves (clams) are known to occur in the river. These bivalves are currently being reviewed for possible designation as federally endangered or threatened.

State-listed species and their status are listed in Table 3-3. Detailed information on their habitat requirements or counties in which they occur is available for inspection at the Allegheny National Forest Supervisor's Office.

TABLE 3-3: STATE-LISTED ENDANGERED, THREATENED OR SPECIES OF SPECIAL CONCERN LIKELY TO BE FOUND IN THE ALLEGHENY RIVER CORRIDOR BETWEEN KINZUA AND EMLENTON

Species Common Name	*State Status*
1. American Bittern	Threatened
2. Least Bittern	Threatened
3. Eastern Bluebird	Special Concern
4. Bobwhite	Special Concern
5. Northern Harrier	Special Concern
6. Cooper's Hawk	Special Concern
7. Red-shouldered Hawk	Special Concern
8. Great Blue Heron	Special Concern
9. Purple Martin	Special Concern
10. Osprey	Endangered
11. Barn Owl	Special Concern
12. Short-eared Owl	Endangered
13. King Rail	Endangered
14. Upland Sandpiper	Threatened
15. Grasshopper Sparrow	Special Concern
16. Henslow's Sparrow	Threatened
17. Vesper Sparrow	Special Concern
18. Black Tern	Threatened
19. Red-headed Woodpecker	Special Concern
20. Bewick's Wren	Endangered
21. Marsh Wren	Special Concern

22.	Sedge Wren	Threatened
23.	Keen's Myotis	Special Concern
24.	Small-footed Myotis	Threatened
25.	Eastern Woodrat	Threatened
26.	Eastern Massasauga	Endangered
27.	Lake Sturgeon	Endangered
28.	Gravel Chub*	Special Concern
29.	Bluebreast Darter*	Special Concern
30.	Chennel Darter	Special Concern
31.	Gilt Darter	Special Concern
32.	Longnose Gar	Special Concern
33.	River Redhorse*	Special Concern
34.	Longhead Darter*	Special Concern

* *Only documented occurrence in Pennsylvania is from ALLEGHENY RIVER OR ITS TRIBUTARIES Genoways and Brenner, 1985)*

g. *Fish*

The Allegheny River contains a wide variety of game and non-game fish. The more popular game fish species include large and small mouth bass, black and white crappies, yellow perch, bluegills, muskellunge, walleye, northern pike, grass pickerel, channel and flathead catfish, white bass, and brown, brook, and rainbow trout. The Pennsylvania Fish Commission stocks many game fish on a regular basis. There are also at least 40 species of non-game fish in the Allegheny River including five species of chubs, five species of dace, 15 species of darters, and several species of shiners and suckers.

3. *RECREATION OPPORTUNITIES*

The major recreation use of the river is from summer cottage owners and the accompanying water-oriented activities, such as boating, fishing, canoeing, and swimming. There are about 2,000 cottages in the qualifying segments, many of which are grouped in small communities on the "flats" on the inside of river bends.

The occurrence of water-oriented recreation activities in the qualifying segments is as follows:

TABLE 3-4: WATER RECREATION USE BY ACTIVITY*

Segment Number	*Description*	*Length*
1	Kinzua Dam - Warren	7 miles
2	Buckaloons - Tionesta	26 miles
3	Tionesta - Oil City	21 miles
4	Franklin - Emlenton	31 miles

Segment	*Power Boating*	*Boat Fishing*	*Canoeing*	*Shore Fishing*	*Swimming*	*TOTAL USE*	*MRVDs* PER MILE*
1	0.0	1.5	1.3	0.3	0.5	3.6	0.5
2	0.0	16.2	5.0	3.0	0.8	25.0	1.0
3	1.3	4.9	0.4	1.0	0.1	7.7	0.4
4	2.8	5.2	2.7	0.8	0.1	11.6	0.4
TOTAL	4.1	27.8	9.4	5.1	1.5	47.9	0.6

* Thousands of Recreation Visitor Days (MRVDs) Per Year. One RVD is = to one person spending 12 hours or the equivalent; e.g., two people spending six hours each.

KINZUA DAM TO WARREN - 7 MILES

This segment includes the Kinzua Dam tailwaters, a popular fishing area. The valley is narrow and the river straight. A major highway on one bank (PA 59) and a partially paved township road (Hemlock Road, Glade Township) on the other, provide access for private camp development, shore fishing, and swimming.

The only public access point is located just below Kinzua Dam at Big Bend Recreation Area. Most of the canoe trips in the upper portion of the study corridor originate at the Dam. This segment also provides the best canoeing because of the comparatively rapid flow and 2.3 to 3.5 foot drop per mile. Fishing from boats is popular in this segment; power boating is generally restricted by shallow water.

BUCKALOONS TO TIONESTA - 26 MILES

This segment receives the highest recreation use in the river study corridor (double that of the other segments). The river is wide and relatively straight, with only one major bend just downstream from Tidioute. Public highways, paralleling both river banks, and five public boat launches provide good access. As a result, shore fishing, swimming, canoeing, and boat fishing are very popular. Power boat-

ing is restricted because of the shallow water. Allegheny River boat launches are listed in Table 3-5:

TIONESTA TO OIL CITY - 21 MILES

Canoeing and swimming occur at a rate of about 10 percent that of the upper segments because the river becomes deeper and flows much slower. The valley remains broad in this segment, however; the river begins to meander within the valley. There is limited public access with no roads paralleling the banks and only a small private boat launch at President. Power boating activities are concentrated in deeper pools, which occur frequently.

TABLE 3-5: ALLEGHENY RIVER ACCESS SITES

Name	*Administrative Agency*	*Parking & Boat Ramps*	*Camping*	*Picnicking*	*Water & Toilets*
Kinzua Dam	COE	X	-	X	X
Buckaloons	USFS	X	X	X	X
Tidioute North	PFC	X	-	-	-
Tidioute	Boro	X	-	-	X
West Hickory	PFC	X	-	-	-
Tionesta	PFC	X	-	-	-

COE - U. S. Army Corps of Engineers
Boro - Borough of Tidioute
USFS - USDA Forest Service
PFC - Pennsylvania Fish Commission

FRANKLIN TO EMLENTON - 31 MILES

This segment is remote, with little development and limited access. The river has more prominent bends, and the valley becomes very narrow with steep slopes. Most access is provided by primitive roads which follow small streams to the river; no public roads parallel the river banks. There is one private boat launch at Kennerdell. Canoeing and boat fishing are popular. Power boating, originating from Franklin and Emlenton, is also popular. There is little shore fishing or swimming in this segment because of reduced access.

To summarize by activity:

POWER BOATING occurs below Tionesta where the river slows and becomes deeper, and is most frequent between Franklin and Emlenton.

BOAT FISHING occurs in all segments, but is more popular in the upper river, decreasing as one proceeds downstream.
CANOEING occurs primarily above Tionesta, and in the segment from Franklin to Emlenton.
SHORE FISHING, like boat fishing, occurs in all segments, but is more concentrated in the upper river and decreases in frequency downstream.
SWIMMING occurs primarily in the two segments above Tionesta; there is very little use south of Tionesta.

4. *WILDERNESS, RESEARCH NATURAL AREAS (RNAs), AND NATIONAL RECREATION AREAS (NRAs)*

These specially designated areas are all within the Allegheny National Forest, between Buckaloons and Tionesta. The management of these designated areas is detailed in the Allegheny's Land and Resource Management Plan.

On October 30, 1984, Congress passed legislation establishing the Allegheny Islands Wilderness. It is comprised of seven islands:

CRULLS ISLAND (96.2 acres) has old growth stands of riverine forest. About one-third of the island is an old field. The Forest Service owns about 94 percent of all subsurface rights (beneath about 90 acres).

THOMPSONS ISLAND (66.9 acres) is the site of the only Revolutionary War battle in northwestern Pennsylvania. It has an exceptionally fine riverine forest. All subsurface rights are reserved by third parties.

R. THOMPSONS ISLAND (30.0 acres) was hit by a windstorm in 1975. Many trees were shattered. The island was acquired, with the subsurface rights, from the Western Pennsylvania Conservancy.

COURSON ISLAND (61.5 acres) includes two old overgrown fields and a small section of telephone right-of-way. It is a conspicuous feature from Tidioute Overlook and has some old-growth forest. Private interests hold subsurface rights.

KING ISLAND (35.7 acres) contains some very old stands of riverine forest with many trees 35 to 50 inches in diameter. The Forest Service owns all subsurface rights.

BAKER ISLAND (66.9 acres) All trees were downed by the tornadoes of May 31, 1985. Subsurface rights are outstanding in third parties.

NO-NAME ISLAND (9.9 acres) is about half river bottom trees and half dense undergrowth. All subsurface rights are outstanding.

Crulls and Thompsons Islands are also proposed for Research Natural Area (RNA) designation in the *Allegheny National Forest Land and Resource Management Plan*.

The Allegheny National Recreation Area (NRA) was created in the same Pennsylvania Wilderness Act that designated the Island Wilderness. The NRA (in the river corridor) encompasses national forest land on the east bank between Slater Run and Charley Run. The management of these designated areas is detailed in the Allegheny's Forest Plan.

C. SOCIAL AND ECONOMIC ENVIRONMENT

1. *Plans and Programs of Other Agencies*

During the early stages of planning, the Forest Service contacted numerous federal, State, and local agencies, asking them to participate in the planning process. Chapters V and VI of this EIS lists the agencies contacted and briefly summarizes the results.

Some of the agencies have plans or programs for managing resources within the Allegheny River corridor. We see no significant conflicts between these management plans and the alternatives presented herein, nor is there any significant duplication of management effort.

The following agencies have management responsibilities in the river study corridor:

Pennsylvania Fish Commission - Manages the fisheries resource and regulates the anglers. Owns and manages three boat launches between Tidioute and Tionesta.

Pennsylvania Game Commission - Regulates the hunters and owns and manages two tracts: Game Lands #86 on the west bank of the river south of Buckaloons, and Game Lands #47 just east of Oil City. These tracts total about 1,059 acres in the corridor.

Pennsylvania Department of Environmental Resources (DER) - Has responsibility for the State Wild and Scenic Rivers program, and regulation of state laws pertaining to water quality and free-flow on the Allegheny River.

Pennsylvania DER Bureau of Forestry - Manages the Allegheny Tract, Kittaning State Forest on the west side of the river just above Kennerdell. This tract totals about 992 acres in the corridor.

Pennsylvania State Police and local law enforcement officials - Provide police protection within the river corridor.

U.S. Army Corps of Engineers - Manages facilities at Kinzua Dam and enforces federal regulations concerning navigation on and free-flow of the Allegheny River.

These agencies also work with local authorities to enforce existing State and local land use regulations. Table 3-6 summarizes these regulations (by alternative). Table 3-7 shows the same date by eligible segment, and shows how each affects management/development of lands located within sensitive visual zones.

The area classified as being visually sensitive changes as we go up-stream. From Franklin to Emlenton, the sensitive visual zones include the islands, focal landscapes, and 300 feet of shoreline. North of Franklin, these zones include the islands and 100 feet of shoreline.

TABLE 3-6: PERCENT OF SENSITIVE VISUAL ZONES PROTECTED UNDER CURRENT LAND USE REGULATIONS

TYPE OF REGULATION	*ALT I*	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Local Zoning	N/A	42%	7%	100%	42%
Flood Plain and Sewage Permit Regulations	N/A	50%	20%	80%	52%
Erosion and Sedimentation Control Regulations	N/A	100%	100%	100%	100%
Dam Safety and Waterway Management Regulations					
---Permits for shoreline structures/dredging	N/A	100%	100%	100%	100%
---Special provision for Wild and Scenic Rivers	N/A	63%	17%	90%	63%

TABLE 3-7: PERCENT OF SENSITIVE VISUAL ZONES PROTECTED UNDER CURRENT REGULATIONS

REGULATIONS AND BRIEF DESCRIPTION OF THEIR APPLICABILITY TO RIVER	*KINZUA DAM TO TIONESTA*	*TIONESTA TO OIL CITY*	*FRANKLIN TO EMLENTON*
LOCAL ZONING - Restricts type and amount of future development.	100%	0	7%
THE FLOOD PLAIN AND SEWAGE PERMIT REGULATIONS AND THE STORMWATER MANAGEMENT ACT regulate development in the flood plain and limit Kinzua residential development in areas prone to flooding and poor soil drainage.	80%*	50%	20%
EROSION/SEDIMENTATION CONTROL REGULATIONS require preparation of an erosion control plan for all earthmoving activites, and a DER permit when activities exceed 25 acres.	100%	100%	100%
DAM SAFETY AND WATERWAY MANAGEMENT REGULATIONS address structures on the water's edge by requiring a DER permit for docks, riprap, flood walls, commercial dredging, channel changes, river crossings (i.e., bridges and utilities), dams, and any project located within 300 feet of important wetland.	100%	100%	100%
A special provision of the Dam Safety and Waterway Management Regulations requires a review of all activities within 100 feet of designated Wild and Scenic River or federal Wilderness. Permit can ONLY be issued if no significant effect on resources is determined.	90%	90%	17%**

* 50-60% coverage from Kinzua Dam to Warren; 80-85% from Buckaloons to Tionesta.
** Includes shoreline and focal landscape; use 30% if only considering shoreline.

Counties containing Allegheny National Forest lands receive payments from the federal government to offset the absence of tax revenues. The amount is based on the federal acreage within each county and the receipts generated from federal management of the land. Receipts come from timber sales, recreation fees, special use permit fees, and royalties from leasing federally owned minerals. In fiscal year 1987, the counties received nearly $2.7 million dollars.

2. *PRIVATE PROPERTY RIGHTS*

Private ownership in the river corridor is very complicated. Many of the recorded deeds show that ownership is split between the surface and the subsurface. This means that title to the surface belongs to one owner, while title to the layers below the surface are owned by another. This severance of the surface and subsurface ownerships began in the oil boom days of the 1860s. It primarily affects tracts of land larger than 10 acres, due to existing State laws which restrict activity around residential dwellings.

The Allegheny River has been declared a navigable river by both the State* and federal** governments. As a result, certain common laws of Pennsylvania, as well as federal laws and regulations, apply. In general, title to the beds of commercially navigable streams and lakes is held by the State in trust for the public. State ownership encompasses submerged lands existing between the ordinary low water marks of a river. Land above the high water mark on a navigable river is held 'absolutely' by the upland owner. Between the ordinary high and low water, the riverbank owner holds only qualified title, subject to a public easement to navigate, fish, hunt, dredge, and swim.

Public ownership of the shoreline is controversial because, while the public has a general right to use the shoreline between the water's edge and the ordinary high water mark, the public has no rights to cross private lands to get to this shoreline. Also, since completion of construction of the Kinzua Dam in 1966, the ordinary high water mark has changed; some legal questions may exist as to where the actual high water mark is located.

There are about 2,000 residences located in the eligible river sections. The recreation residence or "camp", as it is traditionally called, provides a base for many outdoor recreation activities, such as boating, fishing, and hunting. About half of these cottages are seasonal, used only during summer, weekends, or hunting season. The rest are occupied year-round.

Table 3-8 shows the amount of private residential development in each of the 15 eligible river sections. These sections are described in detail on page 14 of the River Study Report.

* 3/21/1798 Rec'd Law Book No. VI, p. 245; 3/4/1807 Rec'd Law Book No. X, p. 443

** U. S. Army Corps of Engineers, Pittsburgh District.

TABLE 3-8: RESIDENTIAL DEVELOPMENT IN ELIGIBLE RIVER SECTIONS

QUALIFYING RIVER SECTIONS	*MILES*	*NUMBER OF RESIDENCES*	*RESIDENCES PER MILE*
Kinzua Dam to Warren	6.7	200	30
Buckaloons to Cloverleaf Camp	7.8	350	45
Cloverleaf to Courson Island	5.3	150	28
Courson to Hemlock Island	7.9	200	25
Hemlock to Baker Island	5.5	200	36
Baker to Rt. 62 Bridge	5.4	150	28
Rt. 62 Bridge to Hemlock Creek	4.2	65	15
Hemlock to Walnut Bend	6.3	100	16
Walnut to Alcorn Island	4.6	46	10
Franklin to E. Sandy Creek	4.3	9	2
E. Sandy Creek to Sandy Creek	4.2	9	2
Sandy Creek to Kennerdell	6.6	104	16
Kennerdell to Whitherup Run	4.7	106	23
Whitherup to Blacks	5.1	109	21
Blacks to Emlenton	6.4	121	19
TOTALS	85.0	1,919	23

Table 3-9 shows the level of residential development in each of the river segments considered during the formulation of alternatives. Alternatives are described in Chapter II, Sections A and B. (Notice that several of these segments overlap.)

TABLE 3-9: RESIDENTIAL DEVELOPMENT BY ALTERNATIVE RIVER SEGMENT

RIVER SEGMENT	*MILES*	*RESIDENCES*	*RESIDENCES PER MILE*
Kinzua Dam to Warren	7	200	29
Buckaloons to Tidioute	13	500	38
Buckaloons to Tionesta	26	900	35
Tionesta to Oil City	21	361	17
Franklin to Kennerdell	14	122	9
Franklin to Emlenton	31	458	15

Industrial and commercial development in the corridor is presented by sections as follows:

KINZUA DAM TO WARREN - There is no industrial or commercial development in this river segment.

BUCKALOONS TO TIONESTA - This is the most developed portion of the river, containing about 50 businesses. About half are associated with the recreation/tourist trade and are located along U.S. 62, which parallels the river. The tourist businesses include cottage rentals, campgrounds, restaurants, and boat rentals. Exceptions include sand and gravel operations, an earthmoving contractor, and a sawmill.

The other half of the businesses are located in the town of Tidioute and include a hardware store, gas stations, a food market, a motel, apartment complexes, and a bank. There are also several churches and a school.

TIONESTA TO OIL CITY - This is the second most developed segment. Almost all of the commercial businesses are at Tionesta. This town is slightly larger than Tidioute, and contains a court house and other offices associated with a County Seat. A few tourist businesses, including a golf course and time-sharing resort, are located south of Tionesta on U.S. 62.

FRANKLIN TO EMLENTON - This portion of the river is notable for its lack of industrial and commercial development. The village of Kennerdell boasts four businesses, three of which are tourist oriented.

3. *SOCIAL AND ECONOMIC CONDITIONS*

a. *Population*

The primary zone of influence for the Allegheny River Study lies in the northwestern Pennsylvania counties of Warren, Forest, and Venango. The population of these counties is summarized in Table 3-10, and has risen slightly since 1960. Population trends have followed economic trends, particularly changes in the timber and oil industries.

Primary population centers are Warren, Oil City, Franklin, and Emlenton. There are also small communities of various sizes, as well as isolated homesteads, located throughout the river corridor.

TABLE 3-10: POPULATION OF COUNTIES PRIMARILY AFFECTED BY DESIGNATION

COUNTY	*1960*	*1970*	*1980*	CHANGE *1970-1980*
Forest	4,954	4,926	5,072	+2.96 %
Venango	65,295	62,353	64,444	+3.40 %
Warren	45,582	47,682	47,449	-0.50 %

The minority population of these counties is small and rather diverse. It has tended to increase in all counties since 1970. Most of this population lives in boroughs or in the townships near them. The number of minority group members is below 1.0 percent of the population in each of the three counties, in contrast to 10.2 percent state-wide.

TABLE 3-11: 1980 MINORITY GROUP POPULATION

	FOREST	*VENANGO*	*WARREN*
American Indian	13	48	66
Black	11	316	47
Asian/Pacific Islander	7	155	99
Other	8	50	36
TOTAL	39	569	248
Percent of County Population	.8%	.9%	.5%

b. *Workforce*

All three counties have diverse local economies, although the proportion of the workforce varies considerably among several categories. Warren County is the most heavily industrialized.

TABLE 3-12: CHARACTERISTICS OF 1980 WORKFORCE (%)

COUNTY	*EMPLOYED* IN SERVICES*	*EMPLOYED* IN WHOLESALE*	*EMPLOYED* IN MANUFACTURING*	*EMPLOYED* IN OTHER*
Forest	16.3	22.8	35.3	25.6
Venango	14.1	19.1	33.7	33.1
Warren	12.2	26.8	41.1	19.9

**Each category represents an economic sector of the economy.*

c. *Current Economic Situation*

In 1980, the average per capita income in the tri-county area was about $6,313. The median family income was $17,578. Unemployment averaged 11.3 percent, ranging from 5.8 percent in Warren County to 19 percent in Venango County.

The western Pennsylvania economy is based primarily on heavy industry and natural resources. The current trend in heavy industry is to relocate, usually in the south, as equipment depreciates and needs replacement. Current development efforts are aimed at bringing in new industry which can utilize the area's existing natural resources.

Recreation is a major economic activity in the river corridor, and the one most affected by designation. Local people participate, particularly in hunting and fishing, and serve as suppliers of recreation opportunities through campground management, small businesses, restaurants, etc. The river is also heavily used by recreationists from Pittsburgh and Erie, (PA), and from the Cleveland, Youngstown, and Warren (Ohio) area. Many of these regional recreationists own or use seasonal homes and cabins along the river.

CHAPTER IV - ENVIRONMENTAL CONSEQUENCES

The National Environmental Policy Act of 1969 (NEPA) mandated that every Environmental Impact Statement (EIS) fully disclose the key impacts or consequences of proposed major federal actions. In this case, the proposed federal action involves designating none, part, or all of the eligible sections of the Allegheny River between Kinzua Dam and East Brady, PA, as part of the National Wild and Scenic Rivers System.

This chapter discloses the significant environmental consequences associated with implementing each of the alternatives described in Chapter II. They include changes in resource outputs and inputs, as well as positive and negative environmental effects. Environmental consequences result from implementing the various management practices and guidelines described in Chapter II, Sections A and C.

This chapter contains the following sections:

A. ENVIRONMENTAL EFFECTS -

Describes how individual management practices will affect each element of the environment, and what cumulative effects are expected as a result of implementing each alternative. Cumulative effects are expressed in terms of changes to the existing condition of each element as a result of implementing all of the practices associated with a given alternative.

Effects are either quantifed and numbers displayed in table form, or illustrated in graphs (called "Figures" in this document). The numbers used to prepare these graphs are contained in Table 2-2 on pages 2-24 through 2-26.

B. UNAVOIDABLE ADVERSE EFFECTS -

Summarizes those adverse environmental effects which cannot be avoided or mitigated.

C. RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY -

Describes how short-term uses will affect the long-term productivity of the physical and biological elements of the environment.

D. IRRETRIEVABLE OR IRREVERSIBLE COMMITMENTS OF RESOURCES

E. MITIGATION MEASURES -

Identifies measures necessary to mitigate the adverse effects of implementing any of the alternatives.

A number of environmental factors were analyzed, and found to be only minimally affected by the alternatives. These elements are excluded from further documenta-

tion and include such things as: public health and safety, wetlands, air quality, minority representation, and population.

A. ENVIRONMENTAL EFFECTS

1. *SOIL AND LANDFORM*

None of the alternatives will have any significant long-term effects on soil or landform.

Some disturbance will occur in Alternatives II, III, and V when public access sites are constructed. The acreage involved is small, however, and the effects will be of a short-term nature. Table 4-1 summarizes the acres disturbed by this construction.

TABLE 4-1: ACRES DISTURBED BY CONSTRUCTION OF PUBLIC ACCESS SITES

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Acres Disturbed	0	9	6	0	9

Existing soil and landform features will also be affected by implementation of the management guidelines discussed in Chapter II, Section C. These guides will reduce disturbance along the riverbanks and other critical focal landscapes, and this should have positive effects on the soil and landform resource. Based upon the acreage involved, Alternatives II and V pose the greatest constraints on future developments, followed by Alternatives III and IV. Alternative I would allow development to continue under current conditions and has the highest potential for future shoreline disturbance.

2. *ENERGY MINERALS*

None of the alternatives will have any significant long-term effects on energy minerals.

As stated in Chapter III, oil and gas development in the corridor has not precluded eligibility of the river for wild and scenic river designation, nor has it changed the river's classification. (This trend is expected to continue even without designation.) The river valley land is often more valuable for other uses; current development has been unobtrusively located.

The management guidelines contained in Chapter II, Section C, are designed to maintain the river's existing eligibility requirements and prevent any significant adverse effects from future oil and gas development. They call for no surface occupancy on the islands and in the setback zones. The effects of setback zones should be minor, since they consist of very narrow strips of land (100-300 feet wide) and most of the affected area can be accessed by alternate drilling techiques. Existing technology and high costs have deterred current development on the islands and are expected to do so in the future. The acreage affected by these constraints is summarized in Table 4-2.

TABLE 4-2: ACREAGE WITH DRILLING CONSTRAINTS, BY ALTERNATIVE

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Islands with no surface occupancy (acres)	0	680	56	392	641
Shoreline with no surface occupancy (acres)	0	2,845	2,276	436	2,776
TOTAL	0	3,525	2,332	828	3,417
Percent of study corridor acreage	0	13	23	8	14

About two-thirds of the constrained acreage occurs in the river segment between Franklin and Emlenton, where scenic quality is the outstandingly remarkable value. That's why Alternative III shows the highest percentage of constrained acreage.

3. *SAND AND GRAVEL*

None of the alternatives will have any significant long-term effects on sand and gravel.

Current PA DER regulations prohibit dredging of the Allegheny River. We expect these regulations to remain in force throughout the river corridor and do not anticipate any future dredging.

Continued sand and gravel operations within the corridor will be necessary to meet future needs. Gravel pits do not affect eligibility, and additional pits won't either, as long as they are vegetatively screened from the river. Because the crushers, conveyors, and larger stockpiles are often too tall to screen, they will not be permitted in the riverbank setback zones. Actual gravel extraction could take place very close to the river

(with vegetative screening). We assume these requirements will have negligible effects on operating costs, in view of the total value of the resource.

The management guidelines stated in Chapter II, Section C will prohibit surface occupancy of the islands for both sand/gravel and oil/gas operations. Owners of these mineral rights will have to be compensated for their lost rights. Table 4-3 summarizes the acreage involved and the estimated costs (to the public) of acquiring the mineral rights.

Removal of the islands from sand and gravel extraction should have no significant affects. To date, the resource has not been developed because of PA Department of Environmental Resources regulations and prohibitively high development and operating costs; we expect these conditions to continue.

TABLE 4-3: ACREAGE CONSTRAINED FROM SAND/GRAVEL AND OIL/GAS OPERATIONS

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Island acreage	0	680	56	392	641
Value of Minerals @ $250/acre (in thousands of dollars)	0	170	14	98	160
Percent of Designated Corridor where mineral rights will be acquired.	0	2.5%	0.6%	3.7%	2.6%

The difference in the alternatives reflects the relative occurrence of islands in the various river segments. Almost all of the islands located above Oil City. That's why Alternative III (which includes only the Franklin-Emlenton section) has the lowest percentage of land area affected, while Alternative IV (which includes the Kinzua Dam to Tionesta section) has the highest.

4. *VISUAL RESOURCES*

No significant long term or cumulative impact is expected on any of the river segments proposed for designation. However, there is some potential for long-term visual impacts, caused by residential, commercial, or industrial developments, in the undesignated segments.

In river segments proposed for designation, visual impacts would be negligible, based on implementation of management guidelines identified in Chapter II. In the undesignated segments below Franklin, where the probability for private development is high, there is a moderate

potential for significant change in the critical visual areas. North of Oil City, the probability of future development and the potential for this development to cause significant change in the visual resources are both low.

a. *River North of Oil City*

We don't expect major commercial or industrial activities in the upper river over the next 20 years. In addition, road access should remain constant. Therefore, impacts will be primarily the result of new residential construction within the critical visual zones. New structures, some small clearings or openings in the continuous forest canopy and the general expansion of the existing residential/ cabin areas could slowly create small visual changes of low significance.

This assertion is based on the following data:

(1) There is a limited amount of developable land in the critical visual zones (132 acres) due to existing land types; i.e., steep slopes, flood plain or riparian habitat;
(2) Over the next 20 years, private development is expected to reflect past trends, showing only slow growth;
(3) Development is expected to be a continuing expansion of existing residential/cabin areas and therefore not especially noticeable to river users;
(4) Much of the developable land has already been developed.

b. *River Between Franklin and Emlenton*

The lower river has a much higher probability for new residential/ commercial recreation developments due to sale of an abandoned Conrail right-of-way which runs the entire length of the eastern shoreline. The current owner, a private developer, has converted this right-of-way into a road. This change completely alters existing road access. We also expect slow expansion of the existing residential areas similar to that for the river north of Oil City.

The Environmental Power Corporation proposes the construction of a coal burning electric power plant near Kennerdell. The plant, to be called the Scrubgrass Power Station, is targeted to be operational by December 1990.

Although the plant site is outside the River Study corridor, tentative location of an associated 115 KV power transmission line is inside the corridor. At press time, the Forest Service received a preliminary proposal for location of the transmission line, which would consist of single poles and three wires.

The line would cross the river gorge from the power plant, run north to connect with the old Conrail right-of-way at the north end of the Kennerdell tunnel, and then follow the railroad grade to a crossing north of Franklin.

To date, no determination has been made as to what effect the proposed transmission line would have on the River's visual resources.

Together, these events create a high probability for new shoreline development. There is only a moderate potential, however, that these events would significantly alter river values (that is, if management guidelines were not implemented). This conclusion is based on the fact that much of the critical visual area is within the sharp bends and focal landscapes, and these areas will be unaffected by changes in road access. For more information, refer to pages 2-15 to 2-23, and 3-4 to 3-9.

Information used in arriving at this conclusion:
(1) Sale of Conrail right-of-way in 1986;
(2) Five hundred thirty-four (534) acres, or 5.3 percent of the lower river corridor, is classified as developable. About half of this acreage is located along the eastern shoreline;
(3) Existing residential developments are expected to expand at their current rate;
(4) Much of the developable land has already been developed.

Table 4-4 displays the acreage of developable private lands within the sensitive visual zone. As implied, these lands have the highest probability for future development and by definition are critical to maintaining the river's existing visual characteristics. The greater the acreage exposed, the higher the potential for future change in the visual resources.

TABLE 4-4: ACREAGE OF DEVELOPABLE SENSITIVE VISUAL ZONE (SVZ) LANDS PROTECTED THROUGH DESIGNATION

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Acres of Private Land	0	666	534	98	653

Alternatives II, III and V have the highest amount protected because they include the river segments below Oil City. Alternatives I and IV offer less protection because these alternatives would leave the lower section of river undesignated, and this section contains most of the critical visual areas which are subject to change.

The basic landscape characters of the Allegheny River, described in Chapter III, won't change much in the next 20 years under Alternatives II, III or V. A moderate potential for significant change exists in Alternatives I and IV, depending on the amount of actual development that takes place in the critical visual areas located south of Franklin.

To summarize, the river segment most sensitive to the changes described is located between Franklin and Emlenton. This is the least developed segment, and changes here may be more noticeable than in the landscapes above Franklin. In both Alternatives I and IV, this segment is not designated.

5. *CULTURAL RESOURCES*

"Indian God Rock" is the only cultural resource in eligible sections that is listed on the National Register of Historic Landmarks. The rock is noted for many Indian pictographs which have been mostly obliterated by erosion and vandalism. The significance of the site is the large remaining rock, which requires no protection.

The other cultural resources are not considered outstandingly remarkable characteristics of this river because similar cultural resource site occurrence (both prehistoric and colonial use) exists on the Delaware and Susquehana Rivers.* Designation will not alter the management of these sites, except as a secondary benefit.

Sites on public land are protected by numerous laws and regulations, while sites on private land are not. Therefore, land acquired by the public for other purposes automatically extends legislative protection to any cultural resource sites on that land. Table 4-5 displays the estimated acreage to be acquired under each alternative.

The four alternatives that propose designation are very similar in the percentage of land to be acquired; therefore, the relative added protection they afford to cultural resources is also similar. Alternative I will not provide these added levels of protection.

**Information provided by Dr. Paul Raber, formerly an archeologist with the State Historical Preservation Office (SHPO).*

One additional benefit of designation may occur. If a very significant cultural resource site is found, or proven by investigation, the authority and funding for the public to acquire the site would exist within a designated river corridor. This authority already exists for lands located within the Allegheny National Forest.

6. *WATER QUALITY*

None of the alternatives will have any effect on water quality since existing State laws and regulations will continue to apply and will maintain or improve the existing water quality.

7. *NOISE*

None of the alternatives will have any significant long-term effect on noise. There will be an increase in noise from motorized boats when river segments are designated and use increases 30 percent. Since this noise is created by the recreationists who are also the primary public affected, the effect is considered negligible. The total effect from this type of noise will not become significant until river use becomes much greater.

TABLE 4-5: ESTIMATED AGREAGE WHERE CULTURAL RESOURCES WILL BE PROTECTED AS A SECONDARY BENEFIT

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Acreage involved	0	500.	188.	196.	480.
Percent of designated corridor	0	1.8%	1.9%	1.8%	1.9%

Table 4-6 illustrates the expected increase in motorized boats under each alternative.

TABLE 4-6: INCREASE IN MOTORIZED BOAT USE UNDER EACH ALTERNATIVE

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Increase in motorized boats (MRVDs)	0	9.6	2.4	5.3	9.2
Percent of total river use	0	5.0%	1.5%	3.1%	5.0%

Designation will also have a positive benefit on the noise associated with PA 59 and U.S. 62 in the upper sections of the river. Vegetative screening, provided to protect visual quality, will also reduce road noise levels. Maintaining the islands in their natural condition also provides some noise protection from the highway. Table 4-7 displays the acreage on which vegetative screening will be maintained or added on those river segments above Tionesta.

TABLE 4-7: ACREAGE WHERE VEGETATIVE SCREENING WILL FACILITATE NOISE ABATEMENT

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Vegetative Screening (acres) Island screening (acres)	0 0	436 788	0 0	436 788	367 705
TOTAL	0	1,224	0	1,224	1,072
Percent of designated corridor	0	4.5%	0	11.5%	4.3%

The difference in the alternatives reflects the fact that the affected river sections (Kinzua Dam to Tionesta) occur only in Alternatives II, IV, and V. Most of the shoreline already contains some form of vegetative screening. We expect this trend to continue regardless of designation.

8. *VEGETATION*

None of the alternatives will have any significant affect on vegetation.

Timber harvesting will be moderately constrained. The management guidelines for the Franklin to Emlenton segement would limit timber harvesting in the setback zones to selection tree cuts. Vegetative screening will also become more prevalent along the river. These two factors may increase the amount and density of vegetation in certain areas, but the total resulting change is considered insignificant.

Agriculture will be allowed throughout the corridor regardless of designation. Therefore, we anticipate no effects from any of the alternatives proposed.

9. *WILDLIFE, FISH, AND THREATENED AND ENDANGERED (T&E) SPECIES*

Alternative I (no action) could cause moderate impacts to wildlife. Without the coordination of a management plan, new development and use of private lands would proceed without regard for wildlife. Local land use

regulations would apply, but there would be no setback zones, vegetative screening, or scenic easements. This could cause moderate losses in the amount and quality of wildlife habitat (projected new development within the river corridor is minimal). Potential bald eagle nesting habitat will not be protected from human development. On the positive side, there will be less recreation-oriented disturbance to nesting birds since this alternative projects the lowest level of recreation use.

In all alternatives except Alternative I, the river management plan will coordinate the needs of all resources. Although wildlife is not among the primary objectives, benefits to wildlife habitat will be provided through protection of river values as discussed in the Management Guidelines (Chapter 2).

Through the river management plan, adverse effects that recreational use might have on those wildlife species sensitive to human disturbance (such as wild turkey, bald eagle, waterfowl, herons, and raptors) can be mitigated. The needs of State-listed endangered and threatened species, and species of special concern, will receive consideration.

Those alternatives which include the area between the Kinzua Dam and Buckaloons will protect bald eagle winter roosting sites (II, IV and V). Those alternatives which include the area between Franklin and Emlenton (II, III and V) will protect potential bald eagle nesting sites in this steep, sharply winding segment. Fish habitat will also be protected by not allowing dredging, channeling, and surface mining pits. The anticipated minimal development suggests only minor adverse wildlife impacts in all alternatives.

Alternative II provides the most benefits to wildlife habitat because of its greater length. Establishing setback zones and acquiring 500 acres of private lands protects some shoreline habitat, as well as winter roosting and summer nesting sites for the bald eagle.

Alternative III maintains or enhances wildlife habitat only between Franklin and Emlenton, but this includes potential bald eagle nesting habitat.

Alternative IV maintains or enhances wildlife benefits between Kinzua Dam and Tionesta. This section contains most of the island habitat important to wood ducks and herons. The alternative provides no protection to eagle nesting habitat, but does protect roosting areas.

Alternative V is identical to Alternative II, except that it does not include the segment between Kinzua Dam to Warren.

In summary, Alternatives II and V would be the best for wildlife. Most of the river corridor from Kinzua Dam to Emlenton would be designated.

Alternatives III and IV allow a large portion of the river to remain open to private development governed only by existing local land use regulations.

10. *RECREATION OPPORTUNITIES*

Recreation opportunities on the river will probably increase if the river is designated. Table 4-8 summarizes our projections. The following estimates and assumptions about changes in recreation use were used in order to compare and analyze the alternatives:

a. The change in recreation use as a result of designation is calculated and compared only for qualifying segments.
b. Use is assumed to remain the same in undesignated segments. Changes in water oriented recreation use due to continuation of current river management (in undesignated segments) are not factored into our analysis. Such changes would be the same for all alternatives and would not affect the comparative results of our analysis.
c. Designation of the river will cause increased public awareness and curiosity, and stimulate use of the river.
d. It is assumed that increased use will not exceed the river's carrying capacity.
e. No additional regulation of water related recreation use will be needed.
f. Lack of public access is limiting use below Tionesta.

Based on the above assumptions, here is what we believe will happen to recreation use:

KINZUA DAM TO TIONESTA - Recreation use will increase about 30 percent if these segments are designated. Public access and support facilities (gas stations, restaurants, campgrounds, etc.) are in place and adequate to provide for this increased use.

TIONESTA TO OIL CITY - Recreation use will increase about 20 percent if these segments are designated. Public access is currently lacking on this segment of river. Construction of a public boat launch and parking area at President will correct this situation and facilitate an additional 10 percent increase in use (for a total of 30 percent).

FRANKLIN TO EMLENTON - Recreation use will increase only about 10 percent because public access is severely limited. The construction of two public boat launches at Venango and Kennerdell will facilitate an additional 20 percent increase in recreation use (for a total of 30 percent).

The projections in Table 4-8 are based on the assumptions cited above.

TABLE 4-8: INCREASED RECREATION USE FOR EACH ALTERNATIVE (MRVDs)

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Increased river use due to designation *	0	14.4	3.5	8.6	13.3
Total river recreation use **	47.9	62.3	51.5	56.5	61.2
Total corridor recreation use ***	143.8	186.9	154.3	169.5	183.7
Change in total corridor recreation use ****	0	43.1	10.5	25.7	39.9

* *Includes only river recreation use, such as boating, canoeing, fishing, and swimming.*

** *Includes existing river recreation use and projected increases as a result of designation.*

*** *Includes recreation use of the land in the corridor, as well as the water. Land activities include camping, picnicking, hiking, bicycling, driving for pleasure, hunting, recreation cabin use, and gathering forest products.*

**** *Change in total recreation use as a result of designation, computed as the difference between total use for Alternative I and each of the other four alternatives.*

All segments of the river would receive about a 30 percent increase in recreation use if designated. Therefore, total use will vary depending upon the length of river designated. Based on this assumption, Alternative II will cause the greatest increase in use, followed by Alternatives V, III, and IV. There will be no increase in recreational use under Alternative I, which represents a continuation of the current management situation.

11. *WILDERNESS, RESERACH NATURAL AREAS (RNAs), AND NATIONAL RECREATION AREAS (NRAs)*

None of the alternatives will have any affect on these specially designated areas because they are managed under individual management plans which will not change with designation of the river.

12. *PLANS AND PROGRAMS OF OTHER AGENCIES*

a. *Tax Base*

Designation will affect the local tax base in two ways. First, purchase of private lands by a public land management agency removes these lands from local taxation. Table 4-9 shows the projected loss in annual tax receipts to the tri-county area as a result of public land purchases. This comparison is based on 1981 tax data for Forest, Venango, and Warren Counties.

TABLE 4-9: ANNUAL LOSS IN TAXES TO THE TRI-COUNTY AREA AS A RESULT OF PUBLIC LAND PURCHASE

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Reduction in local tax receipts	0	$1,130	$613	$253	$1,104

Local county governments receive payments from the federal government based on the amount of national forest land within the county and the amount of revenues generated from that land. This includes receipts from timber sales, fees at developed recreation sites, fees from special use permits, and royalties from leasing federal minerals. The payments are designed to offset the loss in local tax base as a result of fee title acquisition by the federal government.

Table 4-10 shows the projected annual payments to the tri-county area as a result of acquisitions by the Allegheny National Forest. Alternatives I and III show no effects because neither of them contain any National Forest lands.

TABLE 4-10: ANNUAL INCREASE IN PAYMENTS TO COUNTIES FROM 25 PERCENT FUND AND PAYMENTS-IN-LIEU-OF-TAXES (PILT) AS A RESULT OF NATIONAL FOREST LAND ACQUISITION

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Increased Payment to Counties	0	$723	0	$723	$649

The general effect of designation on local taxes is very minor for all of the alternatives considered. Annual tax receipts will vary from a net gain of $470 in Alternative IV to a net loss of $613 in Alternative III. Alternatives I, II and V show net losses in tax revenues of $0, $407 and $455, respectively.

b. *Public Ownership*

Designation is expected to have no significant effects on management of public lands administered by the PA Fish Commission, PA Game Commission, PA Department of Environmental Resources, or the USDA Forest Service. Existing management plans recognize the value of maintaining river characteristics. Additional recreation use

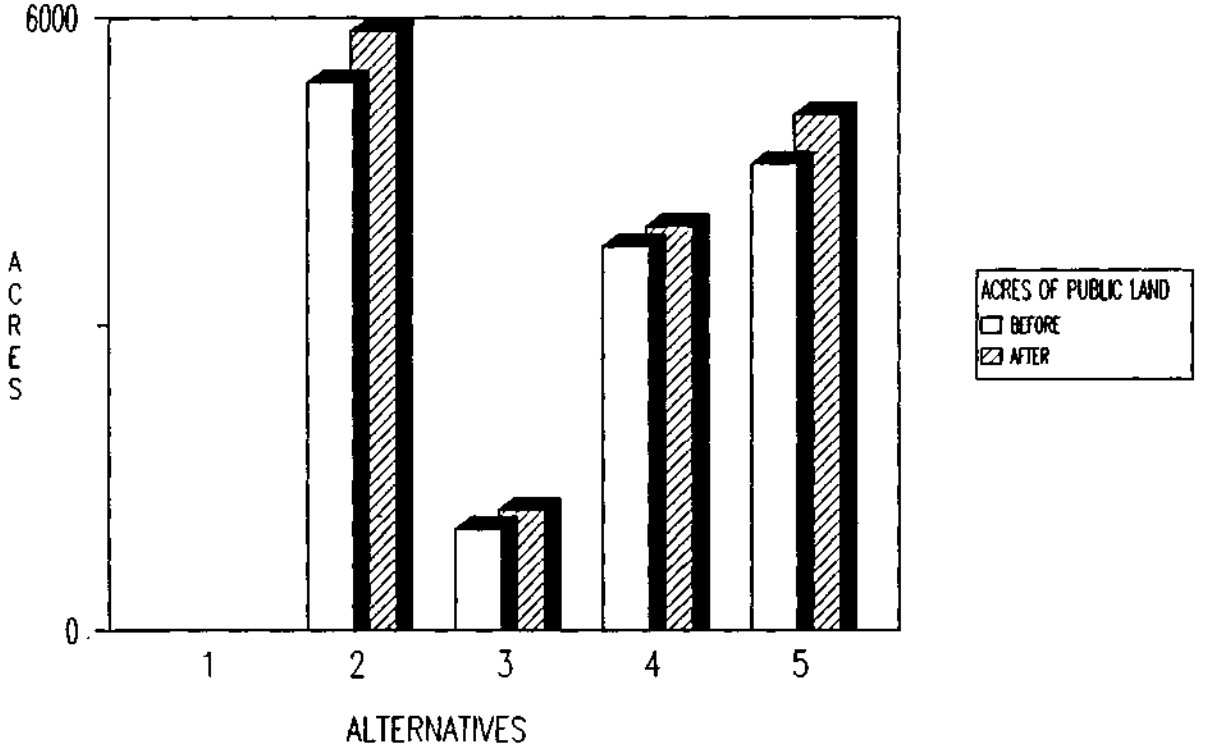
is expected, but should not create significant law enforcement or administrative problems.

Continued protection of the Allegheny's free-flowing character and water quality relies on continuation of the water project permit systems administered by the PA DER and the U.S. Army Corps of Engineers.

Designation will require adherence to existing policies and regulations and could affect future staffing needs. In total, these effects are expected to be very minor under Alternatives II through V.

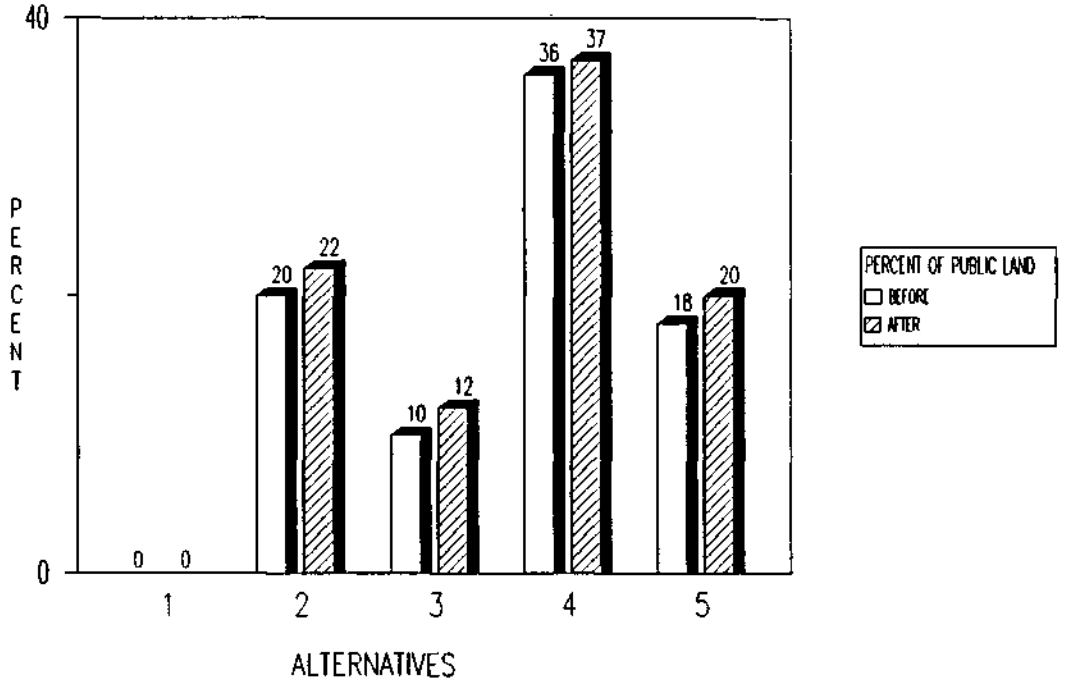
Designation will have some minor effects on existing ownership patterns. This is important because the degree of public ownership is a good indicator of the difficulties involved in implementing each alternative. When public ownership is high, it lowers administrative costs, reduces conflicts with private uses, and provides management flexibility.

FIGURE 4-A: ACRES OF PUBLIC OWNERSHIP BEFORE AND AFTER DESIGNATION



Figures 4-A and 4-B illustrate the change in public ownership as a result of fee title purchase of critical visual areas. (These purchases are discussed on page 4-17 under the section entitled "Private Property Rights" and displayed in Table 2-2.) Alternative II calls for the most fee title purchase, 500 acres, followed by Alternative V, 480 acres; Alternative IV, 196 acres; and Alternative III, 188 acres. No additional purchases are projected under Alternative I except for those needed to facilitate implementation of the existing *Allegheny National Forest Land and Resource Management Plan.*

FIGURE 4-B: PERCENT OF PUBLIC OWNERSHIP BEFORE AND AFTER DESIGNATION



c. *Administrative Agency*

The method used to designate a Wild and Scenic River will generate different effects on each level of government.

Alternatives II, III, and V call for designation under procedures described in Section 2(a)(ii) of the Wild and Scenic Rivers Act. (See page 2-3 of this EIS for a detailed description.) This method gives local and State government responsibility for developing a river management plan and administering the river corridor. The USDA Forest Service and other federal agencies would not be actively involved except in the role of an adjoining landowner. Maximum control is maintained at the local and State levels by relying primarily upon their land use regulations to regulate new development and use on private land. It also requires, however, the most investment in local and State resources. Additional staffing may be required for

County Planning Commissions, and local dollars will be needed for development of the management plan and administration of the river corridor.

Alternative IV proposes designation under Section 2(a)(i) of the Act. Primary management responsibility will be assigned to the USDA Forest Service, with participation from local and State governments. This method would require the federal government to finance the costs of developing a river management plan and administering the river corridor.

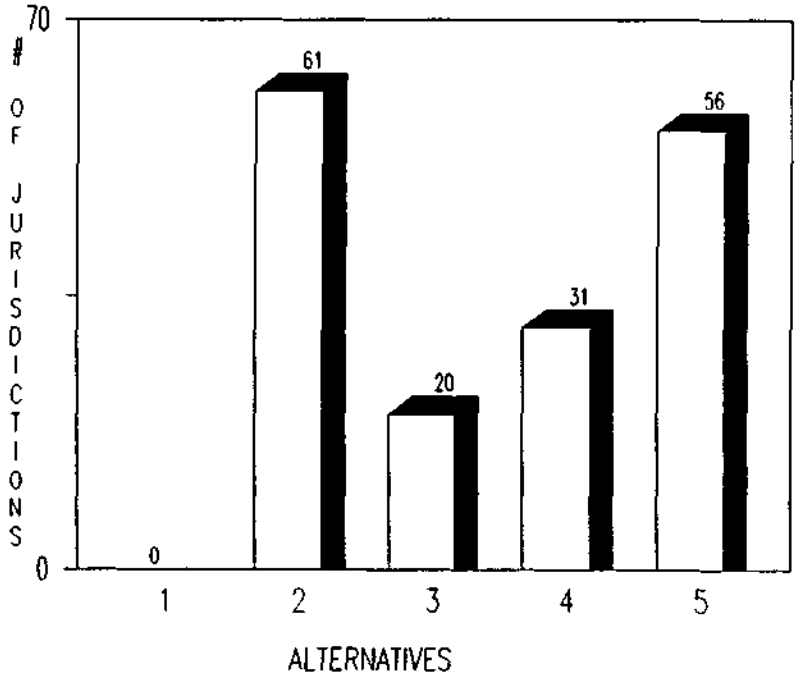
Alternative I would be unaffected since this alternative proposed no designation.

d. *Management Complexity*

Another aspect relating to ease of management is the number of agencies and local governments affected by designation. The more legal jurisdictions involved, the greater the coordination needs.

Figure 4-C shows the number of governmental jurisdictions involved with each alternative. Based on this information, Alternative II would be the most difficult to implement, and Alternative III the easiest.

FIGURE 4-C: MANAGEMENT COMPLEXITY
NUMBER OF GOVERNMENT UNITS INVOLVED



13. *PRIVATE PROPERTY RIGHTS*

Designation will affect existing private property rights. Figure 4-D shows the amount of land in each alternative where private development rights will be constrained as a result of designation. It also indicates the most probable method to be used in implementing these constraints. Areas affected include the river islands and other critical visual areas available for development. See Chapter II, Section C, and Table 3-2 for further information.

The data contained in Figure 4-D and Table 2-2 is based upon the following assumptions.

a. The analysis identified land areas which are sensitive to change and contain those values which made the river eligible for designation.

b. No specific tracts of land were identified or proposed for a certain type of constraint. The process of specifying constraints and locations will be further refined during development of the river management plan.

c. Once the critical area acreages were identified, the data was broken down by landscape type (See page 3-4 for details) and the following assumptions on accomplishing the constraints were applied.

Landscape 1

The Management Guidelines can be achieved through local zoning.

Landscape 2

(1) Fifty percent of the private islands would be acquired in fee title. The remaining 50 percent were assumed to be either undevelopable or adequately protected through local zoning and State laws.

(2) All shoreline setback zones would be protected under a special provision of the *Pennsylvania Dam Safety and Waterway Management Regulations*. These regulations apply to all activities requiring a DER permit that are within 100 feet of a designated Wild and Scenic River or federal Wilderness. They mandate that such activities be reviewed for compliance with the management objectives of the area. A permit can be issued ONLY if the proposed action will not affect the resources, including the visual character of the river.

Landscape 3

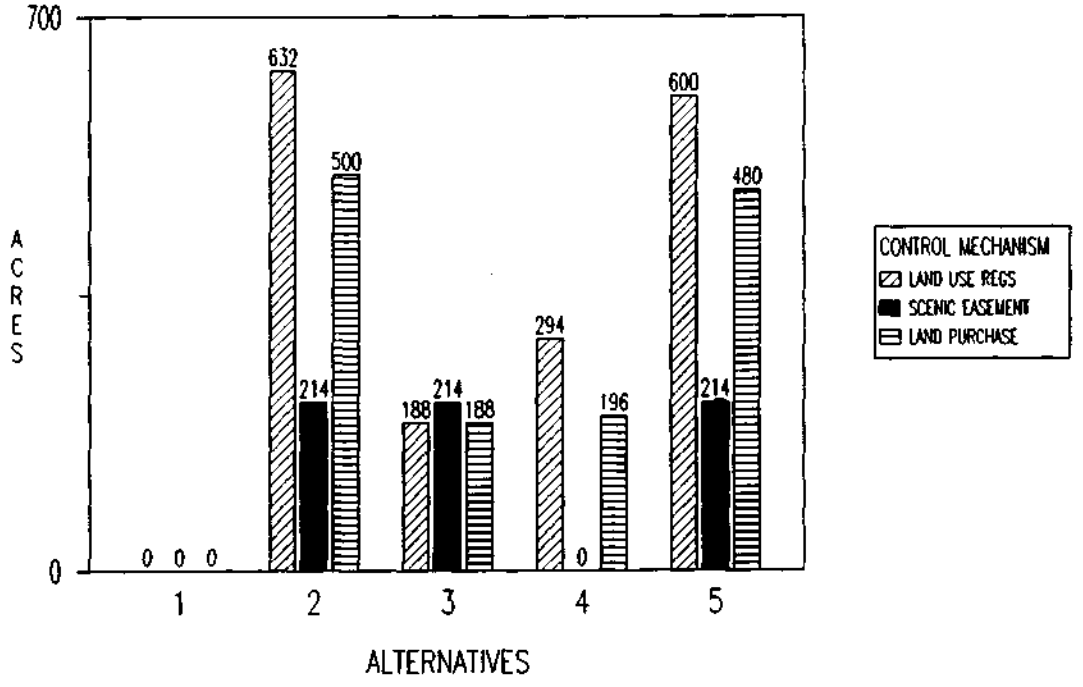
(1) Islands were assumed to require the same treatment described under Landscape 2.

(2) To regulate development in the shoreline setback zones, 30 percent of the area would be protected through existing land use regulations, 40 percent by scenic easements, and 30 percent by land acquisition.

d. Fee title purchase would normally be carried out on a willing buyer, willing seller basis, and used only after other types of regulation fail.

e. Landscapes 2 and 3 show a different breakdown in the types of actions planned because of current differences in land use regulations within the river corridor. North of Oil City, the river is more heavily regulated, so we assumed that existing regulations would be most effective. South of Oil City, the river is less regulated, so we felt that local land use regulations would be effective on only 30 percent of the area. See Table 3-6 for futher information.

FIGURE 4-D: CRITICAL VISUAL AREAS WHERE PRIVATE DEVELOPMENT RIGHTS WILL BE LIMITED



As indicated in Figure 4-D, Alternative I poses the least effects on private development rights, and Alternatives II and V the most. Alternatives III and IV are in the middle with Alternative IV having the least effect on private development rights of the four alternatives recommending designation.

In addition to the effects summarized in Figure 4-D, each of Alternatives II through V require that some form of general zoning be applied over the entire designated river corridor. The regulations will be designed to monitor new development and prevent activities

which are inconsistent with designation (i.e., four-lane highways, major industrial complexes, etc).

The constraints to be applied to private lands as a result of designation are discussed in Chapter II, Section C. They generally apply only to surface occupancy and limit development on undeveloped shoreline areas. This means residential landowners will be allowed to continue or start activities similar in nature and intensity to those now present. The following income producing activities, however, would be affected in varying degrees.

(1) *Timber Management and Agricultural Activities*
The proposed restrictions on these two activities will have negligible effects on future production. Existing terrain precludes future activity on most of the critical visual areas. On manageable lands, activities would be permitted (unrestrained) outside the setback zones. Timber management in the setback zones between Franklin and Emlenton will be limited to selection tree cuts. Timber species in these zones are generally of low value, so economic effects will be insignificant.

(2) *Oil and Gas Development, Sand and Gravel Extraction*
The terrain will probably continue to limit oil and gas development on the side slopes between Franklin and Emlenton. Development in the flats will be permitted to continue outside the setback zones, provided native vegetation is used to screen production sites from river traffic. The only significant restriction on oil and gas development in the corridor is a "no surface occupancy" constraint placed on operations planned for the river islands. This will preclude any development on the islands, and will require the purchase of privately held mineral rights.

Sand and gravel operations are currently located in the upper sections of river between Tidioute and Tionesta. Here, operations would be allowed to continue and future development permitted beyond the setback zones, provided these operations are screened from the view of river users.

As discussed in the previous paragraph, the only significant constraint on future development will be a "no surface occupancy" requirement placed on the islands. This will probably be enforced through purchase of the private mineral rights.

(3) *Commercial and Industrial Development*
Most industrial development is adjacent to Emlenton, Franklin, Oil City, and Warren. These towns provide the support facilities and workers to permit future growth. We expect future industrial development to be limited to these areas. Since they are all

located in ineligible river segments, development should be unaffected by the designation decision.

Future commercial development will be affected in much the same way as oil and gas development. No structures would be permitted on the islands or within the setback zones. Screening with native vegetation would be encouraged to reduce the adverse visual effects on river users. These constraints are not expected to pose any significant effects on future commercial development within the river corridor.

14. *SOCIAL AND ECONOMIC EFFECTS*

a. *Employment*

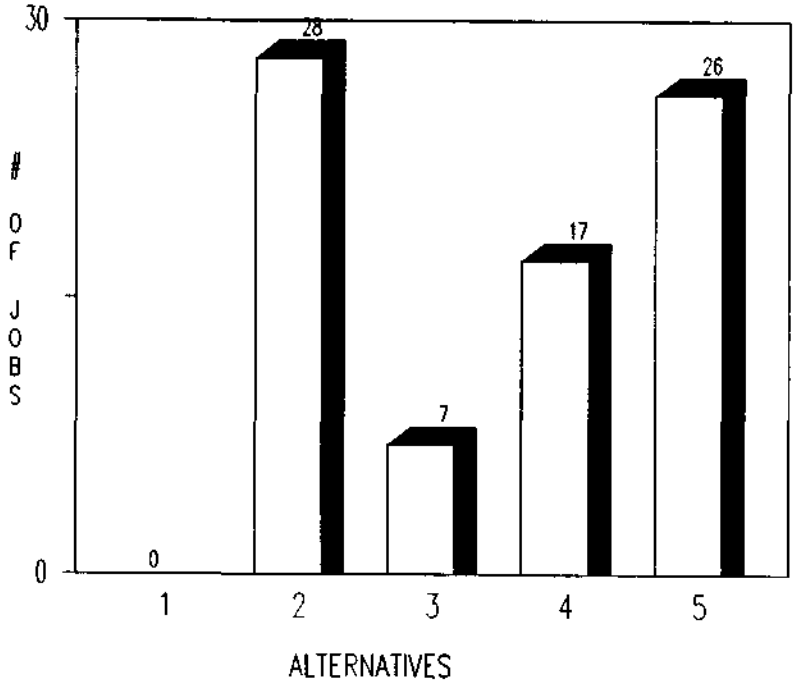
The social and economic effects on employment are a function of employee displacement. Displacement occurs when a worker is forced to work in a new occupation as a result of job abolishment. None of the proposed alternatives should produce significant displacement.

There will be some increased employment in the "recreation services" sector of the economy. Figure 4-E shows the expected increase for each alternative. Most of these jobs will be seasonal, so none of the alternatives should significantly affect the unemployment rate.

b. *Lifestyles*

We expect no significant effect on the lifestyles of any social groups living within the river corridor as a result of implementing any of the proposed alternatives.

Figure 4-E: TOTAL NUMBER OF NEW JOBS CREATED OVER THE NEXT 20 YEARS

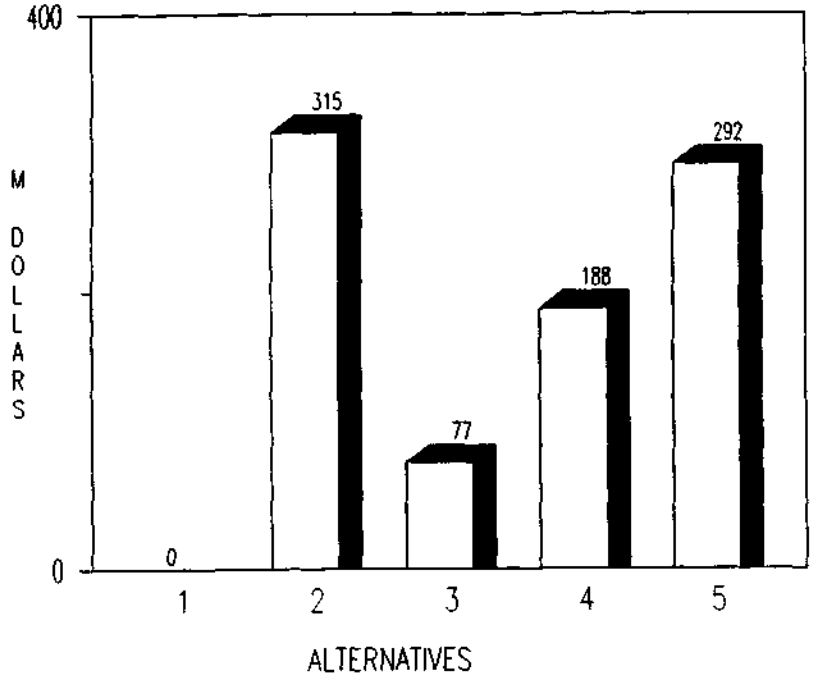


c. *Minority Groups*
We expect no signficant effect on any minority groups as a result of implementing any of the proposed alternatives.

d. *Regional Economy*
Figure 4-F shows the net annual increase of dollars flowing into the regional economy for each alternative. These figures take into account the direct, indirect, and induced effects of recreational expenditures on the local economy. They were computed by applying IMPLAN coefficients to the projected recreational outputs for each alternative at steady state (Year 7). (IMPLAN is an Input-Output Model used by the Forest Service in developing the *Allegheny National Forest Land and Resources Management Plan*.)

Our analysis assumes that recreational use will increase over a six-year period as new access sites are developed and people become aware of the river resource. Starting in the seventh year, we anticipate that use will level off and remain constant over the remainder of the 20-year planning period. This condition is known as "steady state".

FIGURE 4-F: ANNUAL FLOW OF DOLLARS
INTO THE REGIONAL ECONOMY



e. *Economic Efficiency*

Table 4-11 shows the results of our economic analysis; Figure 4-G displays the relative economic efficiency of each alternative. These figures reflect the changes in costs and benefits as a result of designating the sections of river in each alternative. They represent the net change in economic conditions as a result of implementing one of the five alternatives.

The figures contained in Table 4-11 are not annual figures, but total cash flows over the 20-year planning period, discounted by four percent. The "Increased Recreational Use" values were calculated using the change in total use figures contained in Table 4-8, phased in over a six-year period. The "Recreation Construction" costs were computed using a straight $93,000 per each proposed access facility. The "Land Acquisition" costs are based on the constrained land area figures found in Figure 4-D. The "Annual Administrative" costs are based on the following pre-discounted annual figures:

Alternative I	0
Alternative II	$251,000
Alternative III	$ 92,000
Alternative IV	$ 98,000
Alternative V	$230,000

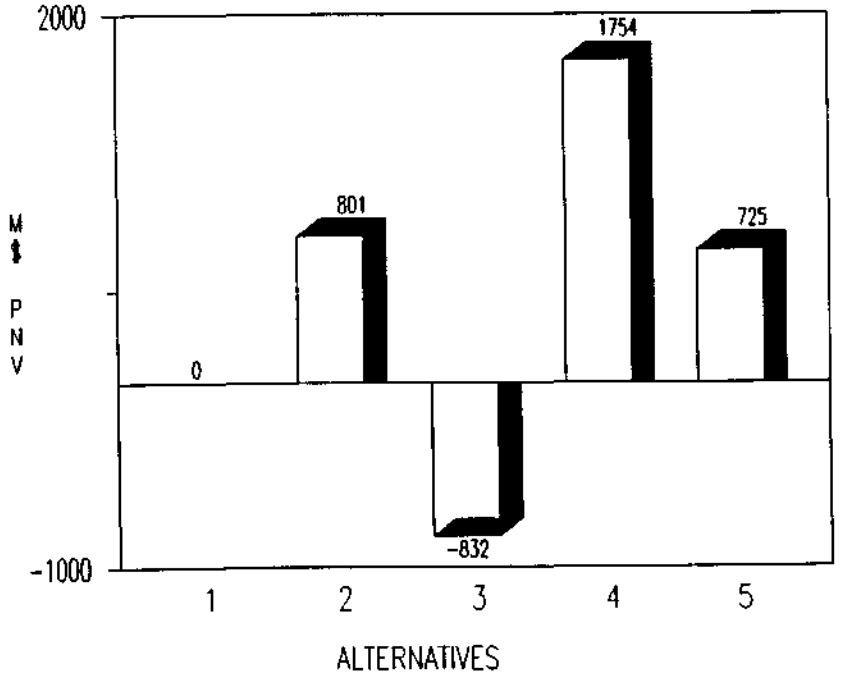
The "Cost of Acquiring Subsurface Mineral Rights" figures are summarized in Table 4-3.

TABLE 4-11: RELATIVE ECONOMIC EFFICIENCY OF EACH ALTERNATIVE (M$)

	ALT I	*ALT II*	*ALT III*	*ALT IV*	*ALT V*
Discounted Benefits (over 20 yrs):					
Increased Recreational Use	0	5,404	1,314	3,213	5,007
Discounted Costs (over 20 years):					
Recreation Construction Costs	0	252	172	0	252
Land Acquisition Costs	0	742	669	37	730
Annual Administration Costs	0	3,548	1,300	1,385	3,251
Cost of Acquiring Subsurface Mineral Rights on Islands	0	61	5	37	49
Cost/Benefit Ratio	0	1.17	.61	2.20	1.17
Present Net Value (PNV)*	0	+801	-832	+1,754	+725

* *See Figure 4-G for further clarification of this line of figures.*

FIGURE 4-G: NET CHANGE IN ECONOMICS OVER THE NEXT 20 YEARS



Any costs or benefits not specifically discussed in this economic analysis are assumed to remain constant in all alternatives. Inclusion of these costs and benefits would change the Present Net Value (PNV), but because they don't change by alternative, the absolute

difference between alternatives would not change with their inclusion.

As indicated in Table 4-11 and Figure 4-G, Alternative IV is the most efficient, with a Present Net Value (PNV) of $1,754,000 and a cost/benefit ratio (C/B) of 2.20. It is well accessed by public roads and has a high percentage of public land ownership.

Alternatives II and V also show positive PNVs and C/B ratios, but less so than Alternative IV. Differences are due primarily to additional land acquisition costs south of Franklin.

Alternative I (no action) shows no net gain or loss. This alternative functions as a benchmark simulating a continuation of current river management. As such, it projects no change in any of the costs or benefits assessed against the other alternatives and, therefore, has a PNV of zero.

Alternative III shows a net economic loss as a result of designation. This loss can be primarily attributed to high administrative costs and land purchases (fee title and scenic easements) between Franklin and Emlenton. This area contains the most sensitive visual resources and requires the most regulation of private development rights.

B. UNAVOIDABLE ADVERSE EFFECTS

Implementation of any of the alternatives presented herein will generate certain effects which can neither be avoided nor mitigated:

1. Under Alternatives II, III, IV, and V, there will be some lost opportunities to extract oil, gas, sand, and gravel from the Allegheny River islands. (No such restrictions apply in Alternative I.)

2. There is a low to moderate potential that visual resources will be adversely affected by future development in undesignated river segments. Alternative II, which calls for full designation, is the only alternative that fully regulates new development; here the management guidelines contained in Chapter II will be fully implemented. Alternatives III and V also have a low potential for significant change in visual resources since they will regulate development in areas with a high probability of future private development. Alternatives I and IV have a moderate potential for significant adverse effects on the visual resource because they don't regulate development on the high probability areas south of Franklin.

3. Some sensitive wildlife species may be displaced in undesignated sections. Designated sections will be under a management plan which would address the needs of these species.

4. The increased recreational opportunities associated with Alternatives II, III, IV, and V, could generate additional noise, litter, and management problems, to which some people may object.

5. The existing free-flowing character and outstandingly remarkable values of the Allegheny River would be allowed to change over time under Alternative I, except as protected by current laws. Alternatives II, III, IV, and V would maintain or enhance such values on designated river sections.

6. Alternatives II, III, IV, and V will limit *new* private development, as a result of zoning restrictions, scenic easements, and fee title purchase.

7. Some opportunities for additional jobs and local revenues may be lost by not designating parts of the river. These losses would be greatest under Alternative I and least under Alternative II.

C. RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY.

This section describes how short-term uses, such as dispersed recreation, will affect long-term productivity of the physical and biological environment. Short-term uses are those that generally occur on a yearly basis or will not be significant beyond the 20-year planning period. Long-term productivity refers to the capability of the land to produce resource outputs beyond this same 20-year period. Social and economic conditions, noise, plans and programs of other agencies, and private property rights are not addressed here because they do not contribute to the production of goods and services.

1. *SOIL AND LANDFORM, CULTURAL RESOURCES, VEGETATION, WATER QUALITY, AND WILDERNESS AND SPECIAL RECREATION AREA DESIGNATIONS* -
   None of the alternatives propose activities that will significantly effect the long-term productivity of these resources.

2. *ENERGY MINERALS AND SAND/GRAVEL* -
   Development restrictions, such as requiring use of vegetative screening and prohibiting occupancy of the river islands, will limit the ability to produce mineral outputs in the short-term. These restrictions, however, will have no long-term effects on the quality or quantity of the mineral resources themselves.

3. *VISUAL RESOURCES* -
   Continued private development will have a moderate potential to significantly affect the visual quality of critical visual areas located south of Franklin.

4. *WILDLIFE, FISH, AND THREATENED AND ENDANGERED SPECIES* - Certain sensitive species may be displaced, and the amount and quality of existing habitat reduced, as a result of continued private development in undesignated river sections.

5. *RECREATION OPPORTUNITIES* - Construction of public access sites will increase river recreational use. It will also remove a small amount of land from other resource production.

D. IRRETRIEVABLE AND IRREVERSIBLE COMMITMENTS OF RESOURCES

Irretrievable commitments of resources occur when opportunities to use or produce a specific resource are foregone for some period of time so that another resource may be produced in its place. Effects of such commitments are measured in terms of lost production or use of the affected resource. Irreversible commitments of resources include the extraction and use of non-renewable resources, and alteration of renewable resources such that they will not return to their existing condition for a long time.

1. *IRRETRIEVABLE COMMITMENTS*

   a. The "no surface occupancy" restrictions on both oil and gas development and sand and gravel extraction will cause some loss in minerals production in the affected areas. These restrictions are addressed in management guidelines (Chapter II) and apply to Alternatives II, IV, and V.

   b. Unrestrained development of private lands within the river corridor could lead to some deterioration of visual quality and habitat of sensitive wildlife species. This affects undesignated river sections in Alternatives I, III, IV, and V.

   c. Construction of public access sites will remove a small amount of land from other resource production. Alternatives II, III, and V are affected by this action.

2. *IRREVERSIBLE COMMITMENTS*

   There are no irreversible commitments of resources as a result of actions recommended in Alternatives I, II, III, IV, or V.

E. MITIGATION MEASURES

Measures necessary to mitigate the adverse effects of implementing any of the alternatives presented herein are discussed in Chapter II, Section C - "Management Guidelines." In addition, all activities carried out on National Forest lands within the river corridor will comply with the management standards and guidelines contained in the Allegheny National Forest Land and Resource Management Plan.

CHAPTER V - LIST OF PREPARERS

As discussed in Chapter I (PURPOSE AND NEED FOR ACTION) under Section E (Study Process), this river study and its environmental impact statement were prepared in two phases. From October 1980 to November 1982, a field task force composed of federal, State, and local government agencies was organized to complete the Allegheny River Study. This group met regularly and was involved in all phases of the analysis. Members of the field task force included:

USDA, Forest Service: Arnold Irvine, Study Coordinator
Jerry Snow, Public Information Officer
Nancy Schuler, Editor, Photographer
Robert Miley, Forestry Sciences Laboratory

Soil Conservation Service, USDA: James Mays

National Park Service, USDI: William Bock
Glen Eugster*

Fish & Wildlife Service, USDI: David Putnam

U. S. Army Corps of Engineers: Greg Bellich

Federal Energy Regulatory Commission: Peter Valeri

Ohio River Basin Commission: Eric Partee

Governor of Pennsylvania: The Honorable Richard Thornburgh

Pennsylvania DER Division of Outdoor Recreation: Roger Fickes

PA Department of Transportation: Harold Huber

Agricultural Stabilization and Conservation Service, Pennsylvania State University:
Stan Tambeck

Forest County Commissioners: Rodney Daum
Warren County Commissioners: James Keller

**Mr. Eugster represented the Heritage Conservation and Recreation Service), which has since merged with the National Park Service.*

Allegheny Township Supervisors: David J. Sherman
Armstrong County Assn of Twp Supervisors: Bernard Goodheart, President
Clarion County Assn of Township Supervisors: Russell, President
Venango County Assn of Township Supervisors: Rosco Speer, President
Warren County Assn of Township Supervisors: Richard Campbell

Armstrong County Recreation Authority: Gary A. Pinkerton
Butler County Engineer: Marshall A. Kapp
Venango County Conservation District: Frederick F. Shook

Southwestern PA Regional Planning Commission: Ann Cardinal
Western PA Regional Planning and Development Commission: Rich Mihalic
Clarion County Dept. of Planning & Development: Carl Rubalcava, Director
Venango County Planning Commission: O. David Peck

In November 1982, a set of draft documents was prepared by the USDA, Forest Service. These were never released for public review.

In Septmeber 1986, the Forest Supervisor of the Allegheny National Forest appointed a new interdisciplinary team (ID team) to review and update the draft documents. The attached *Environmental Impact Statement* and *Allegheny River Study Report* are a product of their work. Members of this team included:

Donald L. Burge	- *Planning Staff Officer*
Dale A. Dunshie	- *Recreation Staff Officer*
Donald R. Hoppe	- *ID Team Leader*
Gary W. Kell	- *Landscape Architect*
Donald A. Clymer	- *Recreation Specialist*
Nancy R. Schuler	- *Forest Editor*
Lawrence W. Brown	- *Program Analyst*
Bradley B. Nelson	- *Wildlife Biologist*

Members of the Allegheny National Forest Management Team include:

David J. Wright	- *Forest Supervisor*
James A. Ehlers	- *Deputy Forest Supervisor*
Martin F. Bilafer	- *Design/Analysis Team Leader*
Paul D. Brohn	- *Public Affairs Specialist*
Donald L. Burge	- *Planning Team Leader*
Dale A. Dunshie	- *Information Management Team Leader*
Peter V. Larme	- *Business Management Team Leader*
Ernest F. Rozelle	- *Operations Team Leader*
Theodore W. Beauvais	- *Marienville District Ranger*
Andrew Colaninno	- *Sheffield District Ranger*
Lionel A. Lemery	- *Ridgway District Ranger*
Corbin Newman	- *Bradford District Ranger*

CHAPTER VI - CONSULTATION WITH OTHERS

A. PARTIES WHO CONTRIBUTED INFORMATION TO THE EIS AND STUDY REPORT

Many agencies, private individuals, and the general public were consulted in preparing this document. This section lists those contacted and the result of some of the contacts.

1. *MEMBERS OF THE ORIGINAL (1980-82) FIELD TASK FORCE*

The following agencies contributed to the preparation of this document:

FEDERAL

U. S. Department of Agriculture:
Allegheny National Forest
NA State and Private Forestry
Soil Conservation Service

U. S. Department of Interior:
National Park Service
Fish and Wildlife Service

Other:
U.S. Army Corps of Engineers
Ohio River Basin Commission
Federal Energy Regulatory Commission

STATE

Governor of Pennsylvania
Northwestern Pennsylvania Regional Planning Commission
Southwestern Pennsylvania Regional Planning Commission
Department of Transportation
Department of Environmental Resources
Cooperative Extension Service

COUNTY

County Commissions:
Armstrong
Butler
Clarion
Forest
Venango
Warren

County Township Assns
Armstrong
Butler
Clarion
Forest
Venango
Warren

2. *OTHER CONSULTATIONS* - USDA Forest Service

Abplanalp, Harold, Realty Specialist, *information on land ownership.*

Brohn, Paul D., Public Information Officer, *assisted with public involvement.*

Clark, Patricia, Forestry Sciences Laboratory, *review of analysis.*

Collins, Thomas, Geologist, *consultations on oil and gas production in corridor, geology.*

Greatorex, Richard, Realty Specialist, *land cost information.*

Hill, James N., Illustrator, *visuals.*

Hill, Russell A., Wildlife Biologist, *information on fish and wildlife.*

Hockinson, Joel, Timber Staff Officer, *letter dated November 17, 1981.*

Jablonowski, Carl, Hydrologist, *flow characteristic interpretations.*

LeClair, Deborah, Landscape Architect, *visual resource assistance.*

Lonoff, Elizabeth, Civil Engineer, *technical editing assistance.*

Lundeen, Lloyd, Wild and Scenic Rivers Coordinator, Washington Office, *review of analysis and assistance with public involvement.*

Miller II, Charles Lewis, Contract Archaeologist, *cultural resource information.*

Miller, Kathleen, Cultural Resource Specialist, *cultural resource information.*

Proebstle, John, Realty Specialist, *land cost information.*

Roles, Jim, Mark Twain National Forest, Eleven Point Wild and Scenic River Manager, *provided development and operating costs.*

Rutherford, Susan, Hydrologist, *consultation on water and air quality.*

Wood, Garnet, Soil Scientist, *soils information.*

USDA, Forest Service, Northeastern Area, State and Private Forestry, *letters dated March 10 and November 5, 1981.*

3. *OTHER CONSULTATIONS* - non-Forest Service

Aaron, David, Clarion County Planning Commission, *review of analysis.*

Bauer, Robert W., Forester, Pennsylvania Game Commission, *timber information by letter dated March 1, 1984.*

Benfield, F. Kaid, Natural Resources Defense Council, *generally briefed on disposition of Wild and Scenic River analysis.*

Black, Honorable Ronald E., State Representative, *review of analysis.*

Bowley, Honorable Curt, State Respresentative, *review of analysis and Forest Service findings.*

Bright, Charles, P.E., Clarion River Planning Commmission, *information on coal - letters of 10/29/81, 11/4/81, and 4/25/85.*

Clifton, Bill, USDA Soil Conservation Service, *review of analysis.*

Coyle, Kevin, American Rivers Conservation Council, *review of analysis and Forest Service findings.*

Craft, S., Geologist, U.S. Geological Survey, Pittsburgh, PA, *indicated in a phone conversation on January 2, 1982 that no sand and gravel resource information is available other than general location maps.*

Diehl, Robert, aide to Senator Heinz, *review of analysis.*

Dituillo, Anne, aide to Congressman Ridge, *review of analysis.*

Dreese, Donald, PA Dept of Environmental Resources, *review of analysis.*

Evans, Patricia, formerly with the Warren County Planning Commission, now a Warren County Commissioners, *review of analysis.*

GAI Consultants, Inc., Sand and Gravel Resources of Northwestern Pennsylvania, Monroeville, PA 1972.

Graff, Delano, Chief - Division of Fisheries, PA Fish Commission, *phone discussion and review of analysis.*

Hoskins, Robert, U.S. Army Corps of Engineers, Kinzua Dam, *dam outflow information.*

Lee, Dennis, Pennsylvania DER, Bureau of Water Quality Management, Meadville, PA, *air quality information - December 22, 1981.*

Lee, Ron, Area Biologist, Pennsylvania Fish Commission, Tionesta, PA, *flow needs for fish habitat.*

Lehman, Roger, PA Game Commision, *review of analysis.*

Magistrella, J. H., Pennsylvania DER, Forester, *provided timber information by letter dated March 26, 1984.*

Mays, Jim, USDA, Soil Conservation Service, Harrisburg, PA, *land use data by letter dated October 30, 1981.*

O'Brien, Michael, Heritage Conservation and Recreation Service, Philadelphia, PA, Allegheny River Study, 1980.

Papilla, Richard, Armstrong Planning Commission, *review of analysis.*

Peltz, Rick, District Administrator for Congressman Clinger, *review of analysis and Forest Service findings.*

Pennsylvania DER, Bureau of Air Quality Management, Regional Office, Meadville, PA, *air quality information - December 22, 1981.*

Putnam, David, U.S. Fish and Wildlife Service, Biologist, State College, PA, *provided wildlife habitat information.*

Root, Patricia, aide to Senator Specter, *review of analysis.*

State Geological Survey, *Oil and Gas Developments in Pennsylvania in 1980 with Ten Year Review and Forecast*, 1981.

Shaffer, Honorable Timothy, State Senator, *contacted conerning status of river study and analysis.*

U.S. Army Corps of Engineers, *Floor Plain Information Allegheny River for Warren, Forest, Venengo, and Clarion Counties - 1974 and 1975.*

Weston Consultants, *River Recreation Use Estimates Using Secondary Data and Supportive Field Surveys*, West Chester, PA 1981.

Wiegman, Dr. Paul, Western Pennsylvania Conservancy, *review of analysis.*

Wright, Honorable David R., State Representative, *contacted concerning status of river study and analysis.*

Zimmerman, Robert, aide to State Senator Peterson, *review of analysis and Forest Service findings.*

CHAPTER VII - INDEX

The index shows readers where to find significant descriptive information in the Draft Environmental Impact Statement and River Study Report on the items listed below.

Each reference includes the chapter number (1 through 7), appendix number (A), or River Study Report reference (R), along with the number of the page where the discussion occurs. Page numbers within a chapter are separated by commas, and page numbers between chapters are separated by semicolons. For example, references listed under "access" should be interpreted as page 7 of the Summary; pages 5, 6, and 8 of Chapter II; pages 17 and 18 of Chapter III; page 22 of Chapter IV; and page 20 of the River Study Report.

APPENDIX A - PUBLIC INVOLVEMENT

A. EFFORTS OF ORIGINAL FIELD TASK FORCE

The Forest Service made extensive efforts to determine the major issues, concerns, and resource opportunities that would affect the decision to designate all, none, or parts of eligible river sections as part of the National Wild and Scenic Rivers System. In summary, the Forest Service involved members of the public, interested private agencies, and State and federal agencies by doing the following:

1. News releases informing the public about the River Study and about a series of "Open House Meetings" were distributed state-wide beginning in August 1980.

2. Public meetings were held in October 1980 in Warren, Oil City, Tidioute, and Emlenton, PA. The purpose of these meetings was to explain the Wild and Scenic River Program, how the Study would be conducted, and to introduce the interdisciplinary team (Field Task Force) to the public.

3. Conducted a Float Trip of the Allegheny River to determine the eligibility of river sections within the river corridor and to assign a maximum potential classification to each eligible section. The trip was conducted by the Field Task Force, and several private individuals and local governmental officials were in attendance.

4. In November 1980, a newsletter concerning the River Study was mailed to about 5,000 groups and individuals. This newsletter explained the Wild and Scenic Rivers' classification process and listed the sections of the Allegheny River that could qualify under the different categories.

5. The Field Task Force developd a preliminary list of issues from public comments and discussions with task force members. These issues were then sent to 83 selected individuals in February 1981, with a letter asking for their comments; nineteen people responded.

6. After analyzing and refining this input, the issues were presented to the public at a series of workshops in April of 1981. These sessions were held in New Kensington, East Brady, Oil City, and Warren, PA.

7. In addition to the April 1981 Workshop, numerous individual and small group contacts were made to discuss issues. Nine issues were developed from these sessions.

8. In May 1981, a tabloid was mailed to approximately 5,000 groups and individuals. This tabloid described the issues gathered from the previous public involvement sessions and listed a preliminary set of management alternatives. The public was asked to comment on the issues and alternatives through a response form included in the tabloid.

9. In June 1981, the Forest Service conducted several workshops in towns located along the river. The response to the May 1981 Tabloid were discussed and our initial reaction to them. Other pertinent comments were solicated and merged into the Issues, Concerns and Opportunities (ICOs) and Alternatives.

10. In the Fall of 1981, a followup tabloid was prepared and sent to the public. This tabloid summarized the final set of ICOs, answered questions raised by the public, and presented to the public for comment, a preliminary set of decision criteria to be used in selecting a preferred alternative.

Using the above input, the Field Task Force developed a set of draft documents in November 1982.

At this point, the Forest Sevice decided not to request a public review of the draft documents. New implementing regulations had been issued which required some modification of the existing documents, and the Allegheny lacked sufficient manpower to revise these documents while at the same time developing its Land and Resource Management Plan.

B. INTERIM MEETINGS TO DISCUSS CHANGES IN THE 1982 DRAFT DOCUMENTS.

1. In September 1983, the USDA Forest Service conducted a workshop at Franklin, Pa to discuss changes in the Wild and Scenic River Implementing Regulations.

2. On August 20, 1985, a meeting was held by the Venango County Planning Commission to discuss proposed abandonment of the Conrail Tracks located on the south/east river bank. The USDA Forest Service was in attendance at this meeting.

C. EFFORTS BY THE SEPTEMBER 1986 FOREST SERVICE INTERDISCIPLINARY TEAM

1. Floated portions of the river in October 1986 and September 1987. The trips were designed to familarize team members with the river, review findings of the original Field Task Force, and discuss suitability of eligible river segments for designation.

2. In February 1987, team members met with representatives of American Rivers Conservation Council and PA Department of Environmental Resources - Wild and Scenic Rivers Division. Discussed initial results of suitability analysis.

3. In March 1987, met with federal and state legislators to discuss initial results of suitability analysis.

4. Also in March 1987, established a work group of sixteen individuals and organizations (termed "Key Contacts") to act as a sounding board for review of the preliminary draft documents. This group was briefed on March 18, 1987; we requested their written response regarding the adequacy of our analysis and alternatives being considered.

5. In January 1988, met with the executive board of Pennslyvania Forestry Association. Discussed results of modified suitability analysis.

6. In February 1988, met with the Deputy Regional Forester, Region 9, USDA Forest Service, to review the adequacy of suitability analysis and select a tentative preferred alternative.

7. In August 1988, met with representatives of American Rivers Conservation Council and PA Department of Environmental Resources - Wild and Scenic Rivers Division. Discussed the findings of our analysis and the Forest Service's Preferred Alternative.

8. In October 1988, met with members of PA Department of Environmental Resources to coordinate public involvement between the two agencies. Also briefed federal and State legislators on Forest Service's Preferred Alternative.

9. Ninety-day public involvement period begins in November 1988 and runs into February 1989. See front title page for exact dates.

ALLEGHENY RIVER WILD AND SCENIC STUDY REPORT

A. OVERVIEW

PURPOSE OF STUDY REPORT

The purpose of this study report is to document the findings of the study team on whether portions of the study area are eligible for inclusion in the National Wild and Scenic Rivers System, and to indicate the potential classification which best fits each eligible segment.

The Wild and Scenic Rivers Act (Public Law 90-542) was passed on October 2, 1968, to protect free-flowing rivers which possess outstandingly remarkable characteristics. The Act provides a process by which a river might be added to the National Wild and Scenic Rivers System and establishes criteria by which a river's eligibility for designation may be evaluated. It also specifies three levels of classification under which eligible river segments could be administered and directs that a management plan be developed for all designated rivers.

Here are the objectives of the National Wild and Scenic Rivers System:

1. to protect and enhance the river's existing free-flowing character and outstandingly remarkable values;
2. to make the river and these values available to the public through managed development.

Public Law 95-625, the National Parks and Recreation Act of 1978, amended the Wild and Scenic Rivers Act to include the Allegheny River from Kinzua Dam to East Brady as a Section 5(a) Study River. The Forest Service was designated as the lead agency for study of the Allegheny River.

STUDY PROCESS

The following three-phase process was used in preparing the Allegheny River Study Report.

1. *OFFICE PREWORK* - This phase addressed those tasks associated with organizing the study process and gathering existing resource data. Major jobs included:
   a. establishment of a study team (known as the Field Task Force);
   b. determination of study boundaries;
   c. mapping the entire river corridor and breaking the river down into 23 study sections; and

d. gathering data on existing uses and development.

The Field Task Force also developed specific criteria to be used in determining river eligibility and assigning a potential classification to each eligible section of river.

2. *FLOAT TRIP* - In October 1980, the Field Task Force and interested members of public floated the entire length of the study corridor. The trip lasted three days, followed by a day of discussion. Each participant was asked to apply the eligibility and classification requirements summarized in Table R-3 to each of the 23 river sections.

3. *DETERMINATION OF ELIGIBLE RIVER SEGMENTS AND THEIR POTENTIAL CLASSIFICATION* - The results of the float trip were summarized and discussed by the Field Task Force. Their findings were published in a news release issued in November 1980.

The Field Task Force then directed its efforts toward analyzing the suitability of eligible river sections for inclusion within the National Wild and Scenic Rivers System. A draft Environmental Impact Statement (EIS) was prepared and circulated for internal review in November 1982.

At this point, the Forest Service decided not to go public with a Draft EIS. The decision was made for two reasons:

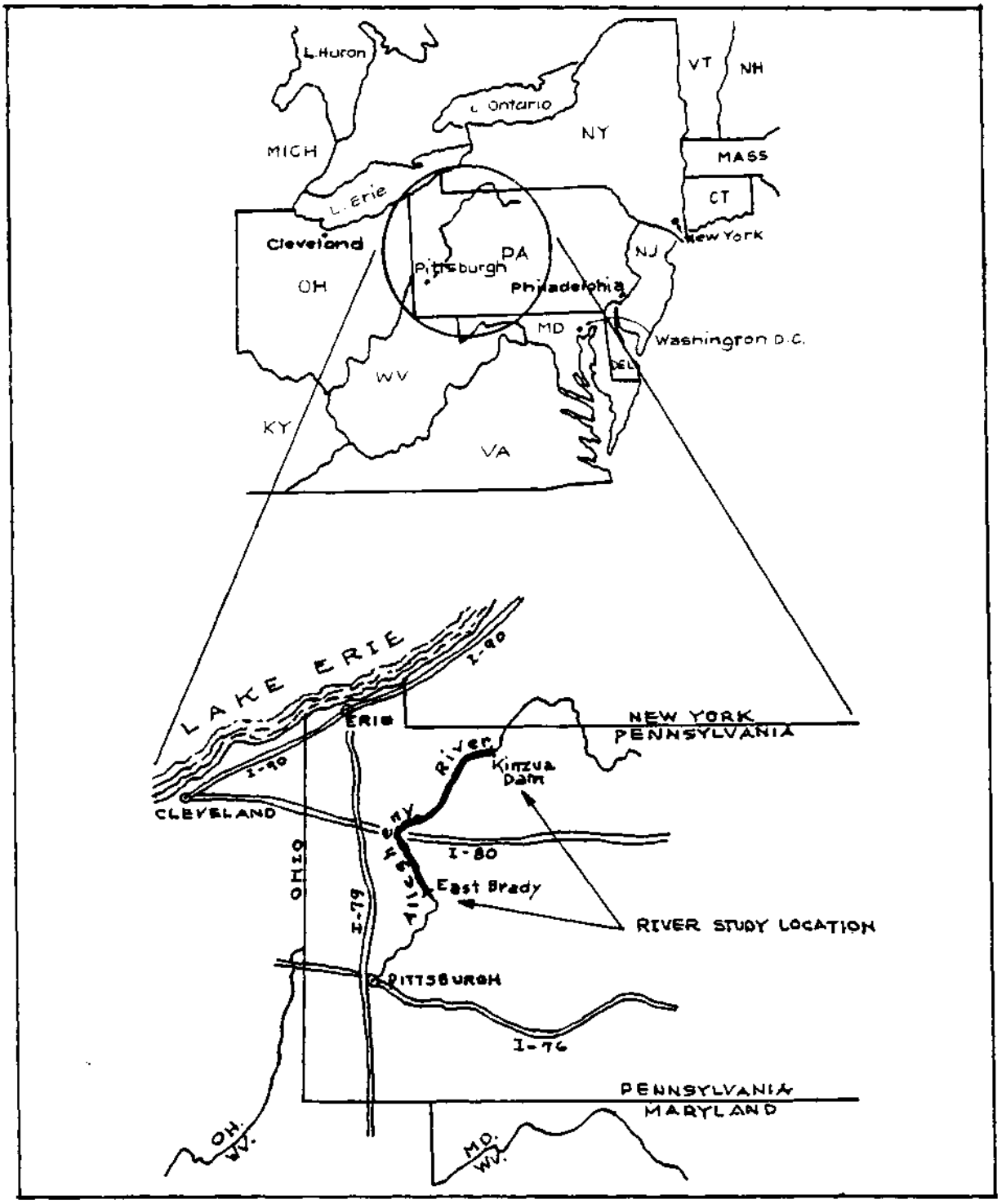
1. New Implementation Regulations were issued in September 1982, requiring several items within the existing Draft EIS to be modified.
2. On the Allegheny, the Forest Service was in the middle of developing its Land and Resource Management Plan, and did not have the necessary resources to conduct two major studies at the same time.

In September 1986, a Forest Interdisciplinary (ID) Team was appointed to update the existing Draft EIS/Study Report. As part of the process, this Team floated parts of the river to see what changes had occurred since November 1982. Their findings are discussed in Sections B and C, and reflected in the comments contained in Table R-4, page 15 of this Study Report.

Location and Study Boundaries

The Allegheny River is located in the Appalachian Plateau Region. It flows from its origins in Potter County, Pennsylvania, northwest through a small portion of New York, and then swings southwest through northwestern Pennsylvania, converging with the Monongahela River at Pittsburgh to form the Ohio River.

Figure R-1: VICINITY MAP



The study corridor consists of the section of river between Kinzua Dam (elevation 1,205 feet) and East Brady (elevation 810 feet) and is 128 miles long. Six counties, several small municipalities and towns, and the Allegheny National Forest border portions of the river in the study corridor.

The study boundary included all of the river that was authorized for study (128 miles) and extended a width of one-quarter mile from each river bank.

A. EVALUATION

In the fall of 1980, the Field Task Force evaluated the Allegheny River for inclusion in the National Wild and Scenic Rivers System. They followed a process which involved gathering data, floating the entire length (October 1980), and using a helicoptor video tape to clear up points raised in task force discussions. This evaluation showed that four contiguous segments, involving 98 miles of river, were eligible for inclusion in the National Rivers System.

In September 1986, a Forest Interdisciplinary (ID) Team was appointed to review and update the original Study Report. Their findings, as summarized in Table 1, concluded that 85 miles of river was eligible. The 1986 ID Team felt that the section of river extending downstream from the mouth of the Clarion River to Armstrong Run (13 miles) was no longer eligible for designation. Their rationale was as follows:

1. *THIS SECTION OF RIVER CONTAINS NO OUTSTANDINGLY REMARKABLE VALUES* -
   As part of the 1986 update of the draft documents, the ID Team refined the definition of "scenic" value and developed a set of visual management guidelines for evaluating scenic quality in terms of existing river characteristics. Following these guidelines, the Team concluded that those sections of river south of I-80 did not contain the necessary river characteristics to qualify as having outstanding scenic value. Further review indicated that these sections of river contained no other characteristics which could be termed outstandingly remarkable from a regional perspective.

2. *THE ORIGINAL STUDY BOUNDARY WAS INAPPROPRIATE* -
   Upon review of the river study boundary south of I-80, the Team concluded that the previous boundary, set at the 1100 foot contour, needed adjustment. In several areas, the river corridor would only be 600 feet in width. This is contrary to the minimum one-quarter mile study corridor established in the Secretary of Agriculture's Implementing Regulations. In addition, the land area between the 1100 foot contour and the minimum one-quarter mile study boundary is generally visible from the river and contains several existing strip-mining areas.

Table R-1 shows the segments deemed eligible for designation. (NOTE - Segments, as defined here, represent the longest contiguous set of eligible study sections as described in Table R-4, page 15).

TABLE R-1: ELIGIBLE SEGMENTS

Section	*Miles*
Kinzua Dam to Route 6 Bridge at Warren	7
Buckaloons Campground to Alcorn Island (by Oil City)	47
Franklin (south end) to Emlenton (at refinery)	31
TOTAL MILES	85

Eligibility was determined by comparing the river to the criteria listed in Sections 1(b) and 2(b) of the Act, and guidelines contained in the Secretary of Agriculture's Implementing Regulations, published on September 7, 1982.

1. *THE RIVER MUST BE FREE FLOWING.* The Allegheny is free flowing from the Kinzua Dam to a point four miles upstream from East Brady. These last four miles are upper reaches of slack water from Lock and Dam 9.

2. *THE RIVER MUST POSSESS ONE OR MORE OUTSTANDINGLY REMARKABLE VALUES.*
   The Allegheny River possesses several values which are considered outstandingly remarkable from at least a Regional perspective. They are:

   a. *Scenic Value*

      The Allegheny River valley features three distinct landscapes which affect scenic values. They are:

      (1) *Landscape 1 - Broad Valley with Pastorial/Rural Scenes*
      A broad river valley characterized by a wide river with slow eddies, and having a distinctly pastoral landscape consisting of farmland, rural settlements, rustic cabins, and river towns.

      (2) *Landscape 2 - Narrow Valley with Natural Appearing Islands*
      A somewhat narrower river valley dotted with many islands. These islands tend to divide the normally wide river into smaller, faster-flowing channels, and gives the user an intimate experience with the river. When you explore the island channels, the quickly changing landscapes enhance the visual variety. The key features of this landscape are the apparent natural vegeta-

tion, the undeveloped islands, and the surrounding river shorelines. These features impress upon the user the sensation of being in a more wild or natural setting than described under Landscape 1.

(3) *Landscape 3 - Narrow, Sharply Winding Valley with Steep Sideslopes*
An unusually narrow river valley with very steep side slopes and sharp bends which nearly turn back on themselves. This type of topography forms distinct focal landscapes with strong spatial enclosure, a feature very uncommon for rivers of this size and length.

This is also the least developed section of the entire Allegheny River. The steep slope and narrow flood plains deter significant agricultural, commercial, residential, or community development. The forest canopy appears nearly continuous along the shoreline and at the focal points described above.

Landscapes 1 and 2 occur in those sections of river from Kinzua Dam to Oil City. The visual contrasts afforded by moving through pastoral landscape, then into more natural island landscape, all within the backdrop of steep forested hillsides, form a unique scenic experience.

Below Franklin, river scenery and character change rather dramatically to the character described in landscape 3. This section of river contains nine sharp bends forming 17 distinct focal landscapes with strong spatial enclosure. From a Regional perspective, this landscape is considered both unique and outstandingly remarkable.

b. *Ecological and Recreational Value (of Islands)*

The 54 miles of eligible river extending downstream from Kinzua Dam to Alcorn Island (Oil City) contains 109 river islands varying in size from less than an acre to 96 acres (Crulls Island).

The island ecology features several stands of virgin riverine forest, and contain many tree species usually found in more southern climates. Many of the islands contain extremely dense herbaceous understories. Ferns reaching six to seven feet in height have been observed. Two of these islands (Crulls Island and Thompson Island) were proposed as candidate Research Natural Areas in the Allegheny National Forest Land and Resource Management Plan.

The islands also add an extra dimension to the recreational experience and contribute to the river's scenic values.

Seven of these islands were also designated as Wilderness under the Pennsylvania Wilderness Act of 1984 (PL 98-585):

Crulls Island -	96 acres
Thompson Island -	67 acres
R. Thompson Island -	30 acres
Courson Island -	62 acres
King Island -	36 acres
Baker Island -	67 acres
No-Name Island -	10 acres

In addition, a portion of the eastern shoreline extending downstream from near Buckaloons Campground to Clark Run is within the Allegheny National Recreation Area.

c. *Cultural Resource Values*

From prehistoric times through the period of euroamerican settlement, the Allegheny River has been the principle travel route linking the Mississippi and Ohio River area with the Great Lakes. As a result, the region's most intensive occupation and use has occurred in the Allegheny River Valley. There are 75 known cultural resource sites in the river study corridor.

While this resource is both important and significant, other rivers have similar site occurrence and their prehistoric use as travel corridors and trade routes is similar. There is, however, one site which is listed in the National Register. The "Indian God Rock" is located in the segment of river from Franklin to Emlenton. This site is an outstandingly remarkable cultural resource value.

3. *RIVER FLOWS MUST BE SUFFICIENT* for a wide range of water-related outdoor recreation. The flows in the Allegheny are sufficient for year-round recreational activities. Flow rates and water levels vary with reservoir releases from the Kinzua Dam. Seasonal variations bring high and medium flows in the spring and fall. Midsummer flows allow more exposure of the river bottom but are sufficient for most recreation activities.

Table R-2 (page 8) contains a summary of mean daily flow rates for the Allegheny River and a list of the minumum flow rates necessary to support various water-oriented recreation activities.

4. *WATER QUALITY MUST MEET THE STANDARDS* set forth in the Federal Water Pollution Control Administration's "Report of the Committee on Water Quality Criteria", published on April 1, 1968. All eligible segments meet or exceed the standards set forth in this report.

This table shows the flow required for fishing and canoeing, compared to the average daily flow rates by month, expressed in cubic feet per second.

TABLE R-2: MEAN DAILY FLOWS AND RECREATIONAL REQUIREMENTS*

Gaging Station	*Needed to Fish*	*Needed to Canoe*	*APR*	*MAY*	*JUN*	*JUL*	*AUG*	*SEP*	*OCT*
Kinzua Dam**	*500*	*1,000*	7,002	2,441	1,689	1,146	2,165	1,779	1,062
West Hickory	*200*	*200*	14,240	4,589	2,704	1,678	3,729	5,682	2,259
Franklin	*510*	*830*	24,150	7,764	4,166	2,426	4,138	7,058	5,051
Parker	*2,070*	*3,100*	31,640	11,260	6,103	4,094	6,492	10,260	7,537

*Source: U.S. Army Corps of Engineers - *Allegheny River 1979*
***This station is entirely regulated by outflows from Kinzua Dam. The U. S. Army Corps of Engineers controls discharges.*

5. *ELIGIBLE RIVER SEGMENTS MUST BE LONG ENOUGH* to provide a meaningful experience. The shortest section of river found eligible is seven miles long. This is long enough to provide an enjoyable half-day canoe trip.

C. CLASSIFICATION

As described above, three segments of the Allegheny river were determined to be eligible for inclusion in the National Wild and Scenic Rivers System. The next step in the study process is to assign a maximum potential classification to each eligible segment.

Section 2(b) of the National Wild and Scenic Rivers Act states that rivers eligible for inclusion in the system shall be classified under one of the following administrative classifications:

1. *WILD RIVER AREAS* - "Those rivers or sections of rivers that are free of impoundments and are generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America."

2. *SCENIC RIVER AREAS* - "Those rivers or sections of rivers that are free of impoundments, with shoreline or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads."

3. *RECREATIONAL RIVER AREAS* - "Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some develop-

ment along their shoreline, and that may have undergone some impoundment or diversion in the past."

The criteria used to determine the potential classification of each eligible section is summarized by administrative class in Table R-3 (page 10). This table includes both the classification and eligibility criteria used by the Field Task Force in evaluating the 23 study sections.

Table R-4 summarizes the results of the classification process. The study concluded that all 85 miles of the Allegheny River could be managed as "recreational" river areas. The remaining 43 miles of the river study corridor were not classified, because they were deemed ineligible.

The results, as summarized in Table R-4, differ from the findings of the original Field Task Force. They concluded that 4.2 miles of river could be managed as "scenic" river areas. The 1986 Study Team dropped this classification back to "recreational".

The reasons for this change are as follows: In the original study, the section of river between East Sandy Creek and Sandy Creek contained an abandoned Conrail track along its southern shoreline. In 1985, this track and a 30 foot right-of-way were sold to a private developer. Since then, the railroad track and ties have been removed and replaced with a private road. This added development caused us to reclassify the East Sandy Creek to Sandy Creek section from "scenic" to "recreational".

The primary reasons for classifying all of the eligible river sections as "recreational" are as follows:

1. Roads or railroads parallel the river for most of its length.
2. Summer cottages and small communities are encountered along the river's entire length.

The classification criteria cited below are not absolute numbers. They represent the Field Task Force's interpretation of very general guidelines contained in the Secretary of Agriculture's Implementing Regulations. These criteria were applied as a whole to each river section, and a weighted average used to determine each section's highest potential classification.

TABLE R-3: CLASSIFICATION CRITERIA

CLASSIFICATION CRITERIA	*IMPORTANCE* RANKING*	*WILD*	*SCENIC*	*RECREATION*
ACCESSIBILITY				
1. Access Points	Medium	Low	Medium	High
2. Miles of roads & RR units	Medium	1 for each 5 miles of river	1 for each 5 miles of river	Unlimited
3. See road & RR percent/unit (conspicuous)	High	1 for each 5 miles of river	2 for each 5 miles; max. 25% of river corridor having road within 1/4 mile	All roads except four-lanes allowed in river corridor
4. Use	Medium	Recreational only - (light use)	Non-commercial & recreational light traffic allowed	Heavy commercial & residential traffic
5. Bridge Crossings	Medium	None allowed	1 for each 5 miles of river	3 for each 5 miles of river
MAN-MADE FEATURES				
1. Audio impact (normally) (obtrusive)	Low	Subjective judgment used to assign classifi-cation	Subjective judgment used to assign classifi-cation	Subjective judgment used to assign classifi-cation
2. Shoreline intrusion riprap straightening, diversion	Medium	None allowed	5 for each 5 miles of river	25 for each 5 miles of river

** A descriptive value assigned by the Field Task Force.*

TABLE R-3: CLASSIFICATION CRITERIA - *page 2*

CLASSIFICATION CRITERIA	*IMPORTANCE* RANKING*	*WILD*	*SCENIC*	*RECREATION*
MAN-MADE FEATURES (continued)				
3. Fixed houses, and camps, etc., related roads, drives, powerline crossings, rights-of-way, etc.	Medium	1 for each 5 miles of river	10 for each 5 miles of river, excluding clusters	50 for each 5 miles of river, excluding clusters
4. Clustered cabins greater than ten units within 1/4 mile of shoreline and light commercial development	High	None	1 mile maximum length, occupy no more than 10% of river corridor	1 mile maximum length, occupy no more than 25% of river corridor
5. Incorporated communities over one mile in length	High	None allowed	None allowed	None allowed
6. Farming operations	Low	Grazing	Row crops	Full range of agricultural activities
7. Natural appearances	Medium	Yes, as defined in above items	Yes, as defined in above items	May be altered by development
8. Strip mines, gravel operations	High	None allowed	None allowed	None allowed
9. Heavy Industry, factories	High	None allowed	None allowed	None allowed

TABLE R-3: CLASSIFICATION CRITERIA - *page 3*

CLASSIFICATION CRITERIA	*IMPORTANCE* RANKING*	*WILD*	*SCENIC*	*RECREATION*
WATER QUALITY - As measured at gauging stations.	High	Meets primary requirements of contact recreation	Quality criteria for water aesthetics	Quality criteria for water aesthetics
OUTSTANDINGLY REMARKABLE FEATURE	High	See Note 1	See note 1	See note 1
FREE-FLOWING CONDITION	High	Yes	Yes	Minor obstruction
WATER FLOW (VOLUME) SUFFICIENT FOR RECREATION ACTIVITIES	High	See Note 2	See Note 2	See Note 2
SUFFICIENT LENGTH FOR MEANINFUL RECREATION EXPERIENCE	High	See Note 3	See Note 3	See Note 3

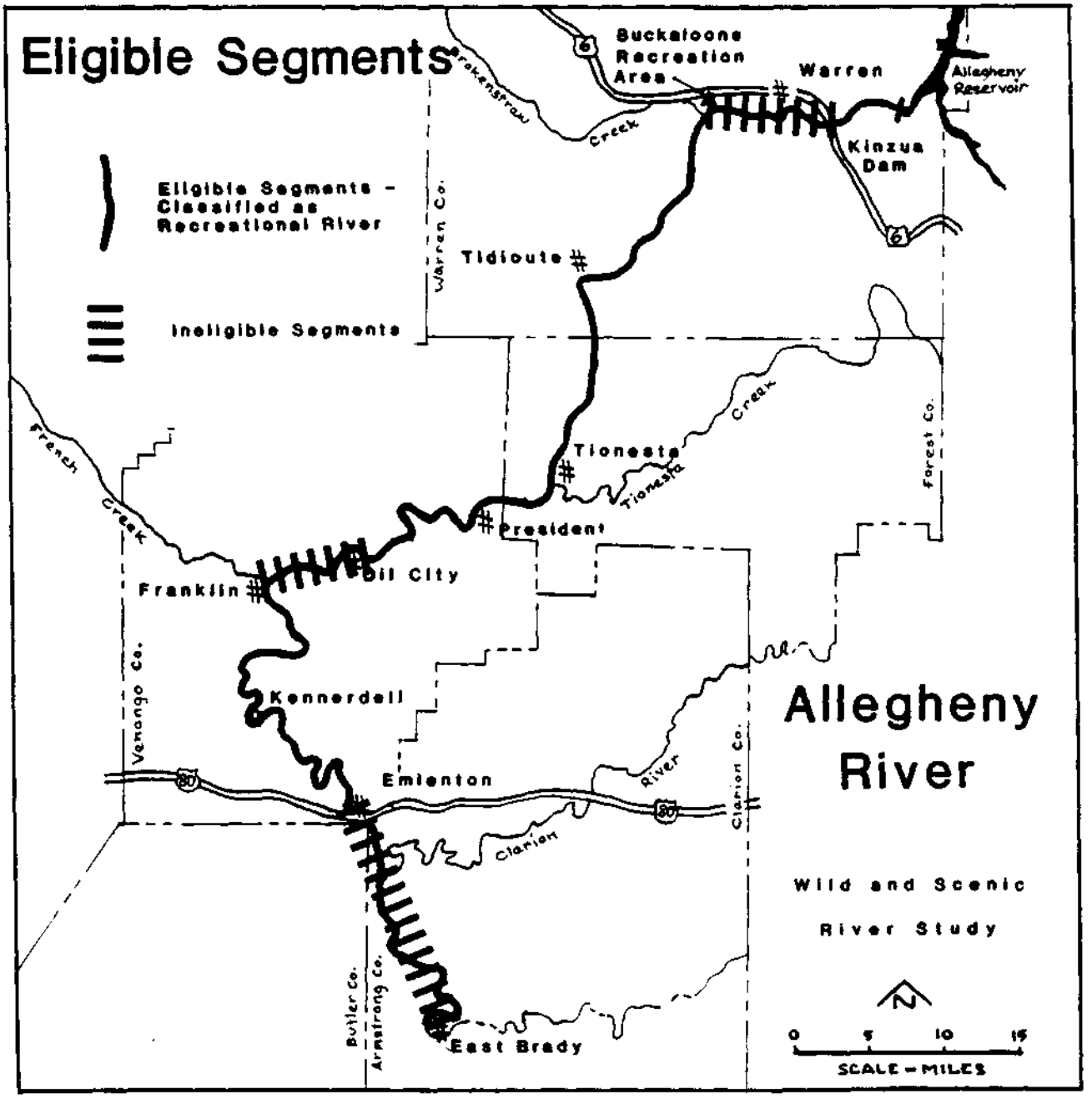
NOTE 1: Must be a feature that is regionally unique, rare or endangered, or not found in other areas of the country.

NOTE 2: Minimum levels were developed at office and checked against flow data from Kinzua Dam. Same for all administrative classifications.

NOTE 3: Determined in office after initial screening of eligible sections. Same for all administrative classifications.

* *A descriptive value assigned by the Field Task Force.*

Figure R-2: MAP OF QUALIFYING SEGMENTS



D. RIVER STUDY SUMMARY

The following conclusions were reached in the Allegheny River Study Report:

1. Eighty-five miles out of the 128 miles included within the study corridor are eligible for designation.
2. All 85 miles of eligible river could be managed under a "recreational" river classification, if so designated.
3. Fifteen out of the 23 study sections displayed in Table R-4 were eligible and classified.

The results of the River Study are summarized in Table 4.

The results of the River Study are summarized in Table R-4.

Table R-4: RIVER STUDY SUMMARY

SECTION	*AREA INVOLVED*	*MILES*	*POTENTIAL CLASSIFICATION*
1.	KINZUA DAM TO ROUTE 6 BRIDGE	6.7	RECREATIONAL

Kinzua Dam and its picnic, boat launch, and interpretive facilities located just below the dam offer numerous recreational opportunities. Moving downstream, the natural appearance and absence of man's intrusions -- other than the clustered dwellings-- are notable. Although the number of dwellings would indicate "no classification", they are well screened by foliage. The team felt that other attributes over-shadowed their intrusion. This section of river contains 13 islands, which provide outstanding recreational and scenic values.

2.	RTE 6 BRIDGE TO EAST END OF MEAD ISLAND	5.0	NOT ELIGIBLE

The City of Warren, with its roads, industry, noise and other intrusions, is not characteristic of a wild and scenic river.

3.	MEAD ISLAND TO BUCKALOONS REC AREA	3.9	NOT ELIGIBLE

Industries, four-lane roads, noise, sand and gravel operation, unscreened buildings, and other intrusions are not characteristic of a wild and scenic river.

SECTIONS 4 THROUGH 11, INCLUSIVE, ARE CLASSIFIED AS RECREATION.

Many cottages are screened and located in clusters, promoting a more natural appearance than would be expected. This section of river contains 98 islands, which offer outstanding ecological, recreational, and scenic values. In all of these segments, shoreline development, noise, and road use preclude a scenic classification. Additional comments on these segments are noted below.

4.	BUCKALOONS TO CLOVERLEAF CAMP	7.8	RECREATIONAL

Part of east bank is included within the Allegheny National Recreational Area. Crulls Island, Thompson Island, and R. Thompson Island are part of the Allegheny Islands Wilderness.

5.	CLOVERLEAF TO EAST END, COURSON ISLAND	5.3	RECREATIONAL
6.	COURSON ISLAND TO N END, HEMLOCK ISLAND	7.9	RECREATIONAL

Although the Borough of Tidioute and a sand and gravel operation create intrusions, Tidioute is well-screened and the sand and gravel operation can only be seen from down-river looking back. The unique islands and the generally natural appearance offset the intrusions noted. Courson Island is part of the Allegheny Islands Wilderness.

7.	HEMLOCK ISLAND TO NORTH END, BAKER ISLAND	5.5	RECREATIONAL

King Island is part of Allegheny Islands Wilderness. Previous sand and gravel operations at West Hickory have been closed and the area revegetated.

8. BAKER ISLAND TO ROUTE 62 BRIDGE 5.4 RECREATIONAL
Although Tionesta intrudes, other parts of this section are scenic enough to warrant recreational classification. Baker Island and No-Name Island are included in the Allegheny Islands Wilderness.

9. ROUTE 62 BRIDGE TO HEMLOCK CREEK 4.2 RECREATIONAL
Clustered communities are better screened than in other up-river areas. Only a golf course and a condominium prevent this section from classification as scenic.

10 HEMLOCK CREEK TO WALNUT BEND 6.3 RECREATIONAL
Although a majority of the section's characteristics indicate a scenic classification, the team felt there were too many visible communities.

11 WALNUT BEND TO SOUTH END, ALCORN ISLAND 4.6 RECREATIONAL
Although a majority of the criteria indicate a scenic classification, there are too many visible communities for such a classification.

12 ALCORN ISLAND TO ISLAND WEST OF RENO 5.9 NOT ELIGIBLE
The town of Oil City, its roads, industry, noise and other intrusions, are not characteristic of a wild and scenic river.

13 RENO TO SEWAGE PLANT AT FRANKLIN 4.9 NOT ELIGIBLE
The city of Franklin, its roads, industry, noise and other intrusions are not characteristic of a wild and scenic river.

SECTIONS 14 THRU 19 WERE SPLIT BETWEEN SCENIC AND RECREATION classification, with recreation classification criteria having the stronger influence. Cottages and clustered dwellings reached a level of development not consistent with a scenic classification. The number of intruding roads/railraods was also inconsistent. This segment of river features outstanding scenic quality. It contains nine major sweeping bends forming 17 distinct focal landscapes with strong spatial enclosure.

14 FRANKLIN TO EAST SANDY CREEK 4.3 RECREATIONAL
Scenic views and lack of development in this section would qualify for a SCENIC classification, but these are offset by roads and railroads along both sides of the river.

15 EAST SANDY CREEK TO SANDY CREEK 4.2 RECREATIONAL
This area contains little development and is well screened. A railroad on the north side is also well screened. Only the existence of a new road running the entire length of the southern shoreline precludes "scenic" classification.

16 SANDY CREEK TO KENNERDELL BRIDGE 6.6 RECREATIONAL

17 KENNERDELL TO WHITHERUP RUN (ST. GEORGE) 4.7 RECREATIONAL

18 WITHERUP RUN TO BLACKS 5.1 RECREATIONAL

19	BLACKS TO NORTH OF REFINERY AT EMLENTON	6.4	RECREATIONAL
20	REFINERY (EMLENTON) TO CLARION RIVER	6.3	NOT ELIGIBLE

The shoreline development at Emlenton and Foxburg, their industry, and existing strip mines preclude any classification.

SECTIONS 21 THRU 22 - EXTENSIVE DEVELOPMENT EXISTS AT PARKER AND WEST MONTEREY.
Although the section is mostly natural, it contains several housing developments. No distinct, outstandingly remarkable value is evident. Past and present coal mining is evident.

21	CLARION RIVER TO WEST MONTEREY	5.6	NOT ELIGIBLE
22	WEST MONTEREY TO ARMSTRONG RUN	5.3	NOT ELIGIBLE
23	ARMSTRONG RUN TO EAST BRADY	4.2	NOT ELIGIBLE

Erosion from strip mines, clustered dwellings, and slack water do not permit any classification.

	TOTAL	126.1

E. MANAGEMENT PRINCIPLES

Implementing Regulations which govern the study of potential National Wild and Scenic Rivers (and the management of those designated) were issued jointly by the Departments of Agriculture and Interior in 1970. On September 7, 1982, these regulations were revised and published in the Federal Register (Vol. 47, No. 173) under the title "National Wild and Scenic Rivers System: Final Revised Guidelines for Eligibility, Classification, and Management of River Areas".

This study report was prepared using these Implementing Regulations.

Within these regulations, Section III provides direction on development of Management Plans. A management plan will be prepared for all rivers (or sections thereof) included within the National Wild and Scenic Rivers System.

WHEN such a plan is prepared, however, depends upon which method is used in designating the river. Section 2(a) of the Wild and Scenic Rivers Act specifies two possible procedures.

First, a river may be added to the system through an Act of Congress. In this case, the management plan would be prepared after designation.

The second method grants authority to the Secretary of Interior, upon application of the Governor of the State concerned, to add rivers currently designated as a State Wild, Scenic, or Recreational river to the National System. In this case, the management plan would be prepared and implemented (through local or State initiative) prior to designation.

Section III also states that the management plan will be developed following a set of general management principles. Such management would be carried out only within the designated river corridor and would use existing federal, state, and local laws (including zoning ordinances).

In addition, some of these management principles would apply only to public lands within the river area. For example, the Wild and Scenic Rivers Act does not open private land to public recreation. Others would apply to private lands only to the extent required by other laws, such as local zoning and air and water pollution regulations.

Section 10(a) of the Wild and Scenic Rivers Act provided the basis for these principles. From this set of general principles, management direction would be developed for river segments classified as "Recreational" and "Scenic". A "Recreational" classification allows more use and development than a "Scenic" classification.

The contents of Section III were used in the preparation of the Draft EIS. Certain broad interpretations were necessary for evaluation of alternatives and to estimate the likely effects of designation. These assumptions are documented in Chapter II of the Draft EIS under the section entitled "Management Guidelines Common to All Alternatives". They will be used in the future to guide development of a river management plan.

The following excerpt from Section III of the Implementing Regulations is presented for your information:

SECTION III - MANAGEMENT

"Wild and scenic rivers shall be managed with plans prepared in accordance with the requirements of the Wild and Scenic Rivers Act, other applicable laws, and the following general management principles. Management plans will state: General principles for any land acquisition which may be necessary, the kinds and amounts of public use which the river area can sustain without impact to the values for which it was designated; and specific management measures which will be used to implement the management objectives for each of the various river segments and protect esthetic, scenic, historic, archeologic, and scientific features.

"If the classification(s) determined in the management plan differ from those stated in the study report, the management plan will describe the changes in the existing condition of the river area or other considerations which required the change in classification."

GENERAL MANAGEMENT PRINCIPLES

Section 10(a) states:

"Each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as it is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development on the special attributes of the area.

"This section is interpreted as stating a non-degradation and enhancement policy for all designated river areas, regardless of classification. Each component will be managed to protect and enhance the values for which the river was designated, while providing for public recreation

and resource uses which do not adversely impact or degrade those values.

"Specific management strategies will vary according to classification but will always be designed to protect and enhance the values of the river area. Land uses and developments on private lands within the river area which were in existence when the river was designated may be permitted to continue. New land uses must be evaluated for their compatibility with the purpose of the Act.

"The management principles which follow stem from Section 10(a). Managing agencies will implement these principles to the fullest extent possible under their general statutory authorities and existing Federal, State, and local laws. Because of these limitations, however, implementation of the principles may differ among and within components of the system depending on whether the land areas involved are federally, state, locally, or privately owned.

"CARRYING CAPACITY - Studies will be made during preparation of the management plan and periodically thereafter to determine the quantity and mixture of recreation and other public use which can be permitted without adverse impact on the resource values of the river area. Management of the river area can then be planned accordingly.

"PUBLIC USE AND ACCESS - Public use will be regulated and distributed where necessary to protect and enhance (by allowing natural recovery where resources have been damaged) the resource values of the river area. Public use may be controlled by limiting access to the river, by issuing permits, or by other means available to the managing agency through its general statutory authorities.

"BASIC FACILITIES - The managing agency may provide basic facilities to absorb user impacts on the resource. Wild river areas will contain only the basic minimum facilities in keeping with the 'essentially primitive' nature of the area. If facilities such as toilets and refuse containers are necessary, they will generally be located at access points or at a sufficient distance from the river bank to minimize their intrusive impact. In scenic and recreational river areas, simple comfort and convenience facilities such as toilets, shelter, fireplaces, picnic tables, and refuse containers are appropriate. These, when placed within the river area, will be judiciously located to protect the values of the popular areas from the impacts of public use.

"MAJOR FACILITIES - Major public use facilities such as developed campgrounds, major visiting centers and administration headquarters will, where feasible, be located outside the river area. If such facilities are necessary to provide for public use and/or to protect the river resource and location outside the river area is infeasible, such facilities

may be located within the river area provided they do not have an adverse effect on the values for which the river area was designated.

"MOTORIZED TRAVEL - Motorized travel on land or water is generally permitted in wild, scenic, and recreational river areas, but will be restricted or prohibited where necessary to protect the values for which the river area was designated.

"AGRICULTURAL AND FORESTRY PRACTICES - Agricultural and forestry practices should be similar in nature and intensity to those present in the area at the time of designation... Rowcrop production and timber harvest may be practiced in recreational and scenic river areas. Recreational river areas may contain an even larger range of agricultural and forestry uses. Timber harvest in any river area will be conducted so as to avoid adverse impacts on the river area values.

"OTHER RESOURCE MANAGEMENT PRACTICES - Resource management practices will be limited to those which are necessary for protection, conservation, rehabilitation, or enhancement of the river area resources. Such features as trail bridges, fences, water bars and drainage ditches, flow measurement devices and other minor structures or management activities are permitted when compatible with the classification of the river area provided that the area remains natural in appearance and the practices or structures harmonize with the surrounding environment.

"WATER QUALITY - Consistent with the Clean Water Act, water quality in wild, scenic, and recreational river areas will be maintained or, where necessary, improved to levels which meet federal criteria or federally approved state standards for aesthetics and fish andwildlife propagation. River managers will work with local authorities to abate activities within the river area which are degrading or would degrade existing water quality."

Additional management principles stem from other sections of the Act as follows:

LAND ACQUISITION (Section 6) - *"The Secretary of the Interior and the Secretary of Agriculture are each authorized to acquire lands and interests in lands within the authorized boundaries of any component of the National Wild and Scenic Rivers System designated in Section 3 of this Act, or hereafter designated for inclusion in the system Act of Congress, which is administered by him, but he shall not acquire fee title to an average of more than 100 acres per mile on both sides of the river."*

(Only a relatively small amount of acreage is expected to be acquired for river management. Land acquisition in fee title would be used to secure access for recreational facilities, such as boat launches, picnic areas, information cen-

ters, and camping areas. Other lands may be acquired in fee title or have their development rights constrained in order to protect those values for which the river was designated. *Such lands would be identified in the Management Plan.* Whenever possible, acquisition would be carried out on a willing buyer, willing seller basis.)

(Concerning lands acquired as part of the National Forest System, all such purchases will be made in conformance with the standards set forth in the Allegheny National Forest Land Management Plan.)

WATER RESOURCE DEVELOPMENT (Section 7) - "*(Any dam, water conduit, reservoir, powerhouse, transmission line, or other project that would have a direct and adverse affect on the river values for which the river was designated could not be built.)*"

MINING (Section 9) - "*Nothing in this Act shall affect the applicability of the United States mining and mineral leasing laws within components of the National Wild and Scenic Rivers System except that:*

"*(i) all prospecting, mining operations, and other activities on mining claims which, in the case of a component of the system designated in Section 3 of this Act, have not heretofore been perfected or which, in the case of a component hereafter designated pursuant to this Act or any other Act of Congress, are not perfected before its inclusion in the system and all mining operations and other activities under a mineral lease, license, or permit issued or renewed after inclusion of a component in the system shall be subject to such regulations as the Secretary of the Interior, or, in the case of national forest lands, the Secretary of Agriculture may prescribe to effectuate the purposes of this Act;*

"*(ii) subject to valid existing rights, the perfection of, or issuance of a patent to, any mining claim affecting lands within the system shall confer or convey a right or title only to the mineral deposits and such rights only to the use of the surface and the surface resources as are reasonably required to carrying on prospecting or mining operations and are consistent with such regulations as may be prescribed by the Secretary of the Interior or, in the case of National Forest lands, by the Secretary of Agriculture; and (iii) subject to valid existing rights, the minerals in federal lands which are part of the system and constitute the bed or bank or are situated a wild river under this Act or any subsequent Act are hereby withdrawn from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto.*

"*Regulations issued pursuant to paragraphs (i) and (ii) of this subsection shall, among other things, provide safeguards against pollution of the river involved and unnecessary impairment of the scenery within the component in question.*

"The minerals in any federal lands which constitute the bed or bank or are situated within one-quarter mile of the bank of any river which is listed in Section 5, subsection (a) of this Act are hereby withdrawn from all forms of appropriation under the mining laws during the periods specified in Section 7, subsection (b) of this Act. Nothing contained in this subsection shall be construed to forbid prospecting or the issuance of leases, licenses, and permits under the mining leasing laws subject to such conditions as the Secretary of the Interior and, in the case of national forest lands, the Secretary of Agriculture find appropriate to safeguard the area in the event it is subsequently included in the system."

(Under the Federal Surface Mining and Control Act of 1977 (PL 85-87), coal strip mining will not be permitted within the designated sections of the river corridor.)

(Continued operation of existing sand and gravel operations is permissible under the Wild and Scenic Rivers Act. New sand and gravel operations would be evaluated, and recommendations made to the U.S. Army Corps of Engineers and the Pennsylvania Department of Environmental Resources (DER) as part of existing permit procedures. Current DER policy prohibits dredging within the riverbed of the study area.)

MANAGEMENT OF ADJACENT FEDERAL LANDS (Section 12) - *"The Secretary of the Interior, the Secretary of Agriculture, and the head of any other federal department or agency having jurisdiction over any lands which include, border upon, or are adjacent to, any river included within the National Wild and Scenic Rivers System or under consideration for such inclusion, in accordance with Section 2(a)(ii), 3(a), or 5(a), shall take such action respecting management policies, regulations, contracts, plans, affecting such lands, following the date of enactment of this sentence, as may be necessary to protect such rivers in accordance with the purposes of this Act. Such Secretary or other department or agency head shall, where appropriate state of local official for the planning, administration, and management of federal lands which are within the boundaries of any rivers for which approval has been granted under Section 2(a)(ii). Particular attention shall be given to scheduled timber harvesting, road construction, and similar activities which might be contrary to the purposes of this Act.*

"Nothing in this section shall be construed to abrogate any existing rights, privileges, or contracts affecting federal lands held by any private party without the consent of said party."

HUNTING AND FISHING (Section 13(a)) - *"Nothing in this Act shall affect the jurisdiction or responsibilities of the states with respect to fish and wildlife. Hunting and fishing shall be permitted on lands and waters administered as parts of the system under applicable state and federal*

laws and regulations unless, in the case of hunting, those lands or waters are within a national park or monument. The administering Secretary may, however, designate zones where, and establish periods when, no hunting is permitted for reasons of public safety, administration, or public use and enjoyment and shall issue appropriate regulations after consultation with the wildlife agency of the state or states affected."

(Trapping is permitted under applicable State and Federal laws.)

WATER RIGHTS (Section 13(b-f))- *"The jurisdiction of the states and the United States over waters of any stream included in a national wild, scenic, or recreational river area shall be determined by established principles of law. Under the provisions of this Act, any taking by the United States of a water right which is vested under either State or Federal law at the time such river is included in the National Wild and Scenic Rivers System shall entitle the owner thereof to just compensation. Nothing in this Act shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from state water laws.*

"Designation of any stream or portion thereof as a national wild, scenic, or recreational river area shall not be construed as a reservation of the waters of such streams for purposes other than those specified in this Act, or in quantities greater than necessary to accomplish these purposes.

"The jurisdiction of the states over waters of any stream included in a national wild, scenic, or recreational river area shall be unaffected by this Act to the extent that such jurisdiction may be exercised without impairing the purposes of this Act or its administration.

"Nothing contained in this Act shall be construed to alter, amend, repeal, interpret, modify, or be in conflict with any interstate compact made by any states which contain any portion of the National Wild and Scenic Rivers System.

"Nothing in this Act shall affect existing rights of any state, including the right of access, with respect to the beds of navigable streams, tributaries, or rivers (or segments thereof) located in a national wild, scenic, or recreational river area."

RIGHTS-OF-WAY (Section 13(g)) - *"The Secretary of the Interior or the Secretary of Agriculture, as the case may be, may grant easements and rights-of-way upon, over, under, across, or through any component of the National Wild and Scenic Rivers System in accordance with the laws applicable to the nation park system and the National Forest system, respectively, provided that any conditions precedent to granting such*

easements and rights-of-way shall be related to the policy and purpose of this Act."

The following policies are consistent with and supplement the management principles stated in the Act.

LAND USE CONTROL - *"Existing patterns of land use and ownership should be maintained, provided they remain consistent with the purposes of the Act. Where land use controls are necessary to protect river area values, the managing agency will utilize a full range of land-use control measures including zoning, easements, and fee acquisition."*

RIGHTS-OF-WAY - *"In the absence of reasonable alternative routes, new public utility rights-of-way on federal lands affecting a Wild and Scenic River area or study area will be permitted. Where new rights-of-way are unavoidable, locations and construction techniques will be selected to minimize adverse effects on scenic, recreational, fish and wildlife, and other values of the river area.*

"Other legislation applicable to the various managing agencies may also apply to wild and scenic river areas. Where conflicts exist between the provisions of the Wild and Scenic Rivers Act and other acts applicable to lands within the system, the more restrictive provisions providing for protection of the river values shall apply."

PENNSYLVANIA WILDERNESS ACT OF 1984 (PL 98-585) - Seven National Forest islands within the river corridor have been designated as Wilderness by Congress. Areas so designated will be managed in accordance with the designation legislation, existing wilderness management legislation and regulations, and a management plan prepared for the wilderness areas. Wilderness management is consistent and compatible with Wild and Scenic River designation.