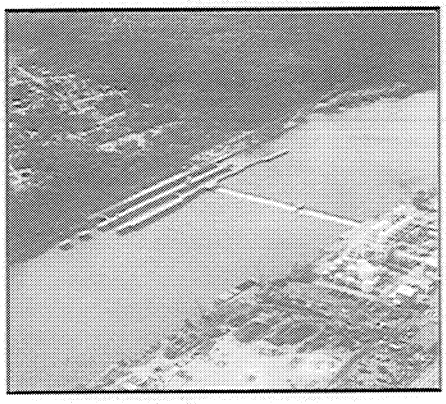
Benedict

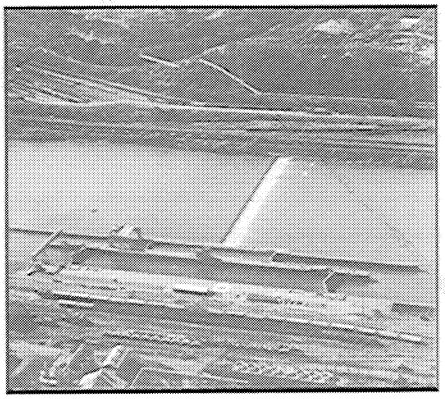
US Army Corps
of Engineers
Pittsburgh District

Lower Monongahela River Navigation System Feasibility Study

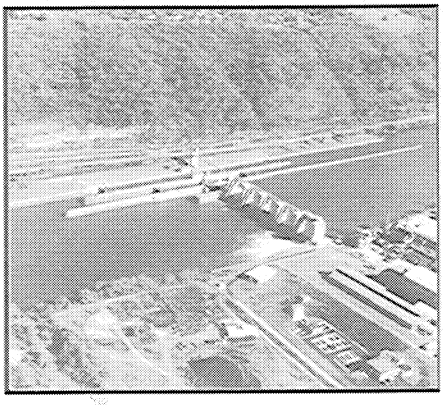
Interim Report



Locks and Dam 3



Locks and Dam 2



Locks and Dam 4

Volume 6 of 6

Public Involvement and
Fish and Wildlife Resources Appendices

FINAL
December 1991

LOWER MONONGAHELA RIVER NAVIGATION SYSTEM STUDY

FEASIBILITY STUDY

VOLUME 6

LIST OF APPENDICES

PUBLIC INVOLVEMENT

FISH AND WILDLIFE RESOURCES

LOWER MONONGAHELA RIVER
NAVIGATION SYSTEM STUDY

APPENDIX

PUBLIC INVOLVEMENT

U.S. Army Engineering District, Pittsburgh
Corps of Engineers
Pittsburgh, Pennsylvania

MONONGAHELA RIVER NAVIGATION SYSTEM
PENNSYLVANIA
LOCKS AND DAMS 2, 3 AND 4

APPENDIX

PUBLIC INVOLVEMENT

TABLE OF CONTENTS

ATTACHMENTS

PUBLIC INVOLVEMENT APPENDIX

1. INTRODUCTION

The purpose of this appendix is to present a record of the public views and responses received during the course of the feasibility study. In general, the public involvement program seeks to:

- Insure that the study addresses all significant concerns, local, regional, and national.

- Encourage greater awareness of the ways in which alternative plans affect various groups.

- Insure that each plan being considered responds adequately to the identified problems; and

- Help insure that the range of plans includes only those that are practical and acceptable.

Public involvement has been an on-going part of the Lower Monongahela River Navigation Study since the study was initiated in the 1980's. However, the intensity of the effort increased over the past two years as the possible courses of action and their potential impacts became more clear. Initially, the involvement was with towing companies and other commercial waterway interests in order to better understand their perceptions of navigation problems and what they felt needed to to correct these problems. The primary concerns of these interests were safety, the unreliability of the nearly 100 year old projects, and the need to provide standard sized locks. More recently, the involvement has been with individuals and public officials in communities that might be affected by the proposed pool adjustments and disposal plans. The principal concerns of these groups are the possible need for the relocation of some families out of their homes, and the adverse impacts that pool changes may have on the economy of the local area. All letters received in response to the public meeting, draft report and the EIS review are provided with the Final EIS in Volume 1 of the report.

This Appendix contains a chronology of public involvement events, describes materials prepared for and distributed to the public, and generally explains the District's approach to providing opportunities for public interaction. ATTACHMENT 1 lists District meetings with outside interests and a brief description of each meeting.

2. PUBLIC INVOLVEMENT PROGRAM

a. Meetings prior to Public Meeting

The first major meetings were in 1989 and 1990 and primarily involved industry organizations and towing companies that operate in the study area. Coordination of the meetings was through DINAMO (The Association for the Development of Inland Navigation in America's Ohio Valley) and the meetings focused on the need to modernize the antiquated and deteriorated projects now on the river. Meetings with the general public commenced in July 1990 and were primarily meant to discuss the tentatively recommended NED plan and the potential impacts on the community, especially the possibility of the relocation of some homes. Various governmental offices were also briefed on the study, including members of the staffs of Senators Heinz and Specter and Congressmen Gaydos and Coyne. Local governmental and private industry representatives participated in two Feasibility Review Conferences for this study, held in November 1989 and February 1991. This program also allowed the District to provide frequent report progress updates to the interested parties.

A particular effort was made to inform all communities that could be affected by the pool changes or disposal plans as soon as feasible and practicable. These contacts commenced soon after the initial array of plans was reduced to the final four alternatives and the impacts of these final alternatives were evaluated in detail. The first step was to contact riverside dock owners, industries, and communities in areas affected by the pool changes to obtain listings of any potentially affected facilities and at the same time make them aware of what changes were being considered.

The second step was to contact the residents in the areas being considered for disposal. Because of the large number of people who could potentially be affected by the different plans and not wishing to alarm those affected by plans that did not prove feasible, this was deferred until the identification of the tentatively recommended plan, which occured in early 1991. Following identification of this plan, areas that could potentially handle the volumes of disposed material were investigated and evaluated as to their social, environmental, and cost implications. This was virtually completed in the early fall of 1991. The people who could be affected in these areas were identified through real estate records and contacted in October of 1991.

The District maintained close coordination with other governmental agencies interested in the Lower Monongahela River Navigation Study throughout the study period. A listing of these agencies is included as ATTACHMENT 2.

b. Public Meeting

The Public Information Packet (ATTACHMENT 3) was mailed to approximately 900 individuals and organizations in September 1991, including local government offices, libraries, industry and environmental organizations, dock owners, and post offices. The mailing list is shown as ATTACHMENT 4. The packet served two purposes: 1) it summarized the study and its affects; and 2) it announced time and location of the Information Centers and Public Meeting and encouraged people to attend. In the case of families that might be impacted by the proposed disposal areas, the District made door-to door visits to their homes to ensure that they were aware of the impacts and to encourage them to visit the Information Centers and attend the Public Meeting. The intent was to make all interested parties aware of the Information Centers and Public Meeting, particularly those who would be personally affected.

The Information Centers were set-up prior to the Public Meeting and were intended to make Corps employees available to residents of the study area who might have questions or desired other information concerning the study. The Centers were held in the cities of Monongahela and McKeesport. A wide variety of graphics, maps and other visuals were displayed, and approximately 40 persons visited the two information centers.

The public meeting was held on October 22, 1991 in Elizabeth, which is near the geographic center of the study area, and was attended by approximately 130 local citizens. The meeting was publicized through the aforementioned Public Information Packet and the media, including newspaper articles appearing in the Pittsburgh Press and Post Gazette. Congressional interests and representatives of governmental agencies, business and industry, along with local residents, presented both formal and informal statements about the tentatively recommended plan. The most critical comments at the meeting came from residents opposed to the use of their areas as disposal sites. The most supportive comments came from towing industry representatives.

A transcript of the meeting contained as ATTACHMENT 5. Copies of the written statements presented at the public meeting are shown in ATTACHMENT 6. Subsequent to the public meeting, a number of letters, petitions and resolutions were received from various interests. Copies of these correspondence with responses are a part of the Environmental Impact Statement contained in Volume 1 of this report.

Media coverage for the feasibility study was handled primarily by the local media. ATTACHMENT 7 contains a sampling of the news articles which were published as follows:

Pittsburgh Business Times Journal Pittsburgh, PA	18 February and 21 October 1991
Pittsburgh Post Gazette Pittsburgh, PA	30 May 1991 and 28 September 1991
Pittsburgh Press Pittsburgh, PA	18 June, 27 September, 6 and 24 October 1991
Herald-Standard Uniontown, PA	24 October 1991

c. Meetings after Public Meeting

As a result of the effort to inform people of the possible impacts of the recommended plan, a series of meetings were held with community groups following the public meeting. The meetings were held at sites and times set by the groups with the main purpose of explaining the likely timing for use of disposal sites as well as real estate acquisition procedures. On-going investigations of alternative disposal plans were also described along with any tentative conclusions. While further meetings are not currently scheduled, the District has offered to meet with any of the community or governmental groups at their convenience to provide additional information on relocation and related issues, answer questions, or provide an updated status report on the evaluation of alternative disposal sites.

ATTACHMENT 1

CHRONOLOGY OF PUBLIC COORDINATION

ATTACHMENT 1
LOWER MONONGAHELA RIVER NAVIGATION STUDY
CHRONOLOGY OF
PUBLIC COORDINATION

13 JAN 1989	CONSOL - discussed their future dock at River Mile 25.0 relative to the Lower Monongahela River replacement alternatives.
10 MAY 1989	DINAMO and WATERWAYS ASSOCIATION of PITTSBURGH - District presented an overview of the status of the studies on the Upper Ohio River and the Lower Monongahela River
11 JUL 1989	DINAMO and WATERWAY USERS AND COMMERCIAL DOCK OWNERS - District provided River tour of potential replacement sites for the Lower Monongahela River Navigation Study.
28 AUG 1989	DINAMO - WATERWAYS ASSOCIATION of PITTSBURGH - and CONGRESSIONAL STAFFERS of the SENATE COMMITTEE on ENVIRONMENTAL and PUBLIC WORKS - District provided tour of Locks and Dams 2 & 3 on the Monongahela River.
2 MAR 1990	HEAVY CONSTRUCTION CRAFTS - District briefed the group on the Lower Monongahela River Navigation Study.
26 JUN 1990	DINAMO - District discussed DINAMO'S review of the alternative plans for the Lower Monongahela River Navigation Study and the local endorsement of a selected plan.
10 JUL 1990	MONONGAHELA RIVER SHORESIDE FACILITIES OWNERS - District made a slide assisted presentation on the condition of L/D's 2, 3, and 4 and the proposed corrective action.
18 JUL 1990	MUNICIPAL INTERESTS - District made a slide assisted presentation on the condition of L/D's 2, 3, and 4 and the proposed corrective action.
27 JUL 1990	BOROUGH OF WEST ELIZABETH - District met with West Elizabeth Borough Council Members and local citizenry to discuss the Lower Monongahela River Navigation Study and its ramifications on them.
2 AUG 1990	CONRAIL - District discussed the affects that Plan No. 1 would have on their bridge at R.M. 11.7.

ATTACHMENT 1
LOWER MONONGAHELA RIVER NAVIGATION STUDY
CHRONOLOGY OF
PUBLIC COORDINATION
(CONT.)

21 AUG 1990	WATERWAYS INDUSTRY REPRESENTATIVES - District addressed the lock size combinations under study in the Lower Monongahela River Study.
1 OCT 1990	BOROUGH OF WEST ELIZABETH - District met with West Elizabeth citizens to discuss the Lower Monongahela River NavigationStudy and its ramifications on them. Questions related primarily to impacts on flood flows and sewer lines.
19 OCT 1990	CITY OF PITTSBURGH, DEPT OF CITY PLANNING - District met with Mr. Sentz and gave an overview of the Lower Monongahela River Study.
29 OCT 1990	PUBLIC INVOLVEMENT MEETIN AT PENN STATE McKEESPORT CAMPUS - District presentated a brief summary of our study efforts and a description of the most probable project.
20 NOV 1990 20 FEB 1991	CONGRESSIONAL (Gaydos and Coyne) and SENATORIAL (Heinz) STAFFS and SENATORIAL (Specter) STAFF - District representatives summarized the work to date on the Lower Monongahela River Study and potential impacts with pool changes with the tentatively selected plan.
7 NOV 1990	US FISH AND WILDLIFE SERVICE - District provided tour of project area disposal sites.
27 NOV 1990	PENNSYLVANIA DEPT. OF COMMUNITY AFFAIRS - District gave an overview of the Lower Monongahela River Study to six representatives of the Pa. Dept. of Community Affairs and to Ms. Doris Dyen of the Pa. Heritage Affairs Commission. The 2 for 3 recommended plan was detailed with the possible remifications to the shoreside facilities and communities.

ATTACHMENT 1
LOWER MONONGAHELA RIVER NAVIGATION STUDY
CHRONOLOGY OF
PUBLIC COORDINATION
(CONT.)

6 DEC 1990	TURTLE CREEK COUNCIL OF GOVERNMENTS - District presented the results of our studies and outlined the minimal effect the tentative recommended plan would have in the Turtle Creek area.
11 DEC 1990	BOROUGH OF ELIZABETH - District gave an overview of the Lower Monongahela River Study emphasizing the tentatively selected 2 for 3 replacement plan.
7 JAN 1991	BOROUGH OF GLASSPORT - District gave an overview of the Lower Monongahela River Study to the Council members, emphasizing the tentatively selected "2 for 3 replacement plan.
28 FEB 1991	EPA (REGION III) - District provided tour of project area.
12 MAR 1991	DUQUESNE LIGHT COMPANY - District met with representatives of Duquesne Light Company to discuss the impacts of Plan No. 4 (3 for 3 plan) on their Elrama Plant.
22 MAR 1991	MONONGAHELA CITY ROTARY - District made a slide assisted presentation on the condition of L/D's 2, 3, and 4 and the proposed selected 2 for 3 replacement plan.
25 & 26 MAR 1991	US FISH AND WILDLIFE SERVICE - District discussed changes to project in response to their "2b" report.
16 APR 1991	PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES District gave an overview of the Lower Monongahela River Study and presented the video "Lower Monongahela River Navigation System Study". Emphasis was placed on the development of the Environmental Impact Statement.
4 JUN 1991	CITY OF DUQUESNE - District met with the city to review their affected facilities with the incorporation of Plan No. 1.

ATTACHMENT 1
LOWER MONONGAHELA RIVER NAVIGATION STUDY
CHRONOLOGY OF
PUBLIC COORDINATION
(CONT.)

6 AUG 1991	PITTSBURGH SAFE BOATING COMMITTEE - District presented a summary of the Lower Monongahela River Navigation Feasibility Study with emphasis on fishing reefs.
30 OCT 1991	FORWARD TOWNSHIP - District met with residents who live near the proposed Bunola Disposal Site and community officials to discuss the development of the site and associated land acquisition policies.
12 NOV 1991	LINCOLN BOROUGH - District met with residents who live near the proposed Coursin Hill Disposal Site, representatives of the Sierra Club and community officials to discuss the development of the site and associated land acquisition policies.
18 NOV 1991	LINCOLN BOROUGH - District met with officials to further discuss the Coursin Hill Disposal Site.
19 NOV 1991	COURSIN HILL RESIDENTS - District met with residents to further discuss the Coursin Hill Disposal Site.
19 NOV 1991	FORWARD TOWNSHIP SUPERVISORS - District met with supervisors to discuss the Bunola Disposal Site.

ATTACHMENT 2

LIST OF GOVERNMENT AGENCIES INVOLVED IN DISTRICT COORDINATION PROCESS

ATTACHMENT 2
LIST OF GOVERMENT AGENCIES
INVOLVED IN DISTRICT COORDINATION PROCESS

(a) Federal Elected Representatives

Senator Arlen Specter (PA)
Senator Harris Wofford (PA)
Senator Robert Byrd (WV)
Senator Rockefeller, IV (WV)
Congressman Joe Kolter (PA)
Congressman John Murtha (PA)
Congressman William Coyne (PA)
Congressman Rick Santorum (PA)
Congressman Joseph Gaydos (PA)
Congressman Austin Murphy (PA)
Congressman Alan Mollohan (WV)
Congressman Harley Staggers, Jr. (WV)

(b) Federal Offices

Advisory Council on Historic Preservation
America's Industrial Heritage Commission
Appalachian Regional Commission
U.S. Department of Agriculture (Forest Service, State Conservationist)
U.S. Department of Housing and Urban Development
U.S. Department of Interior
- Bureau of Mines
- Fish and Wildlife Service
- Geological Survey
- National Park Service

U.S. Department of Transportation
- Coast Guard
- Federal Highway Administration

U.S. Environmental Protection Agency

(c) State Offices

PA Department of Community Affairs
PA Department of Environmental Resources
PA Department of Transportation
PA Fish Commission
PA Game Commission
PA Historical and Museum Commission
PA Intergovernmental Council
Southwest Pennsylvania Regional Planning Commission
Ohio River Valley Water Sanitation Commission

ATTACHMENT 2
LIST OF GOVERMENT AGENCIES
INVOLVED IN DISTRICT COORDINATION PROCESS
(CONT.)

(d) Local Officials

PA County Commissioners

Allegheny County
Washington County
Westmoreland County

Office of Mayor/Administrator

City of Braddock
Charleroi Borough
Clairton
Donora
Dravosburg Borough
City of Duquesne
Elizabeth Borough
Glassport Borough
Jefferson
Lincoln Borough
City of McKeesport
Monessen
City of Monongahela
North Charleroi
West Elizabeth Borough
West Mifflin Borough

ATTACHMENT 3

PUBLIC INFORMATION PACKET

Public Information Packet
Lower Monongahela River Navigation System Study

US Army Corps of Engineers
Pittsburgh District

October 1991

Public Meeting Scheduled

The Pittsburgh District, U.S. Army Corps of Engineers, will be holding a public meeting on Lower Monongahela River Navigation System Study on October 22, 1991, at 7:30 P.M. in the Elizabeth Forward Jr. High School. The location is shown on the following page.

Tuesday, October 22, 1991
7:30 P.M.
Elizabeth Forward Jr. High School

Prior to the public meeting, interested persons will have additional opportunities to learn more about the study. First, the draft report may be reviewed at any of the locations listed on page 9. Second, as part of the public involvement program, the District will have two "Information Centers" where copies of the report will be available for review and where staff members will be on hand to answer your questions and listen to your comments on this study. However, should you wish to submit formal oral or written statements about the study, please present them at the public meeting where they can be entered into the record. For the convenience of area residents and others, the Information Centers will be open on the dates, times and locations shown below:

Information Centers

Friday, October 18, 1991
2:00 P.M. to 4:00 P.M. and
7:00 P.M. to 9:00 P.M.
City of Monongahela
Monongahela Fire Hall

Monday, October 21, 1991
2:00 P.M. to 4:00 P.M. and
7:00 P.M. to 9:00 P.M.
City of McKeesport
Penn State Campus
Room 117, Conference Center

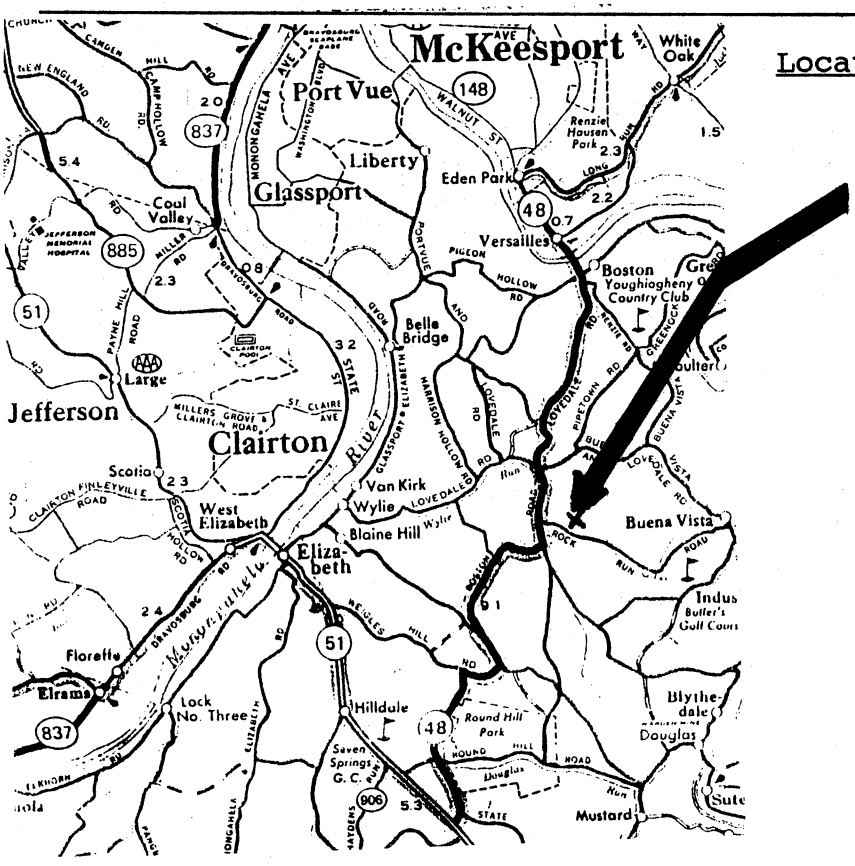
Your Invitation

As indicated on the cover sheet, the Pittsburgh District has scheduled a meeting to brief the public on a study the Corps of Engineers performed on the Lower Monongahela River Navigation System. The meeting will begin with a summarization of the problems with the existing system, followed by a discussion of various alternatives to correct the problems and the presentation of the tentatively selected plan. Following the presentation, you will have the opportunity to make comments and to ask questions. Your questions and comments are important considerations in our decision on a final recommendation and will be included as part of our final report to be completed later this year.

A summary of the study is provided in this information packet. For additional information prior to the public meeting, I invite you to visit one of our Information Centers.

I look forward to seeing you at the public meeting. If you know of anyone else who may be interested in the study, please bring this information to their attention.

Harold F. Alvord
Colonel, Corps of Engineers
District Engineer



Location of Public Meeting

Elizabeth Forward Jr. High School (on left side of Rock Run Road about 1 mile from Rt 48).
Shortcut from Elizabeth: turn left off Rt 51 onto Weigles Hill Road (1st red light after bridge; at Payday's Giant Eagle).

Description of the Projects

The principle area of investigation was the portion of the navigation system created by the three lock and dam (L&D) projects on the Lower Monongahela River near the City of Pittsburgh (see Plate 1 for a map of the study area):

1) L&D 2 in Braddock at river mile 11.2.
2) L&D 3 in Elizabeth at river mile 23.8.
3) L&D 4 in Charleroi at river mile 41.5.

Each project consists of two lock chambers and a dam. The dams convert the free-flowing river with its fluctuating water levels into a series of lake-like pools of relatively constant depth. The locks are like elevators that allow vessels to move between navigation pools. The three projects under study are part of a system of nine navigation projects on the Monongahela River, as shown on Plate 2.

The location, age, and other data on the Lower Monongahela projects are listed in Table 1. The nearby Maxwell L&D project is included for comparison purposes to illustrate the characteristics of a more modern facility typical of the others on the Monongahela River.

Table 1
Lower Monongahela River Projects

	L&D 2	L&D 3	L&D 4	Maxwell L&D
Nearest town	Braddock	Elizabeth	Charleroi	Brownsville
Miles from Pgh	11.2	23.8	41.5	61.2
Lift	8.7′	8.2′	16.6′	19.5′
Lock size (main)	110′x720′	56′x720′	56′x720′	84′x720′
Locks age (years)	38	84	59	26
Dam age (years)	85	84	24	26

Problems with the Projects

The major problems with the lower river projects are their poor structural conditions and the small size of the lock chambers at the L&Ds 3 and 4 projects. The problems are at least in part traceable to the age of the projects. The dam at L&D 2 and both the locks and the dam at L&D 3 are approaching 100 years in age. In addition to nearly a century of wear and tear, the structures were also built according to less stringent standards than are currently used. This renders their continued operation into the future highly uncertain, a fact verified by inspections of the projects.

Because of their age, two of the projects also have the smallest size lock chambers on the river (upon completion of ongoing work upriver). This restricts the size of tows that can pass through them and thereby causes traffic congestion and delays.

Importance of Projects

The importance of the projects is to provide low cost river transportation, especially for coal produced in the Appalachian coal fields of northern West Virginia and southwestern Pennsylvania and consumed in the steel mills and power plants in Pittsburgh and other communities. The river has provided this service for over 150 years since it was first made navigable on a regular basis. In fact, this was the impetus for the initial improvements to the river that began in the 1840's.

Study Process

The importance of the river and the problems with the existing navigation projects indicated the need for plans to allow the projects to continue to operate into the future. The first step was to determine the extent of structural problems through inspections and analysis of core samples taken from the projects. A number of serious problems were identified as a result of this effort. The least cost measures to correct the problems while ensuring safe and reliable operation were then developed. Problems related to the small size of the locks were likewise analyzed. The findings indicated that the small locks would eventually result in higher delays to traffic which, in turn, would make coal and other goods produced in the area less competitive in regional, national, and international markets.

The benefits provided by the navigation system are greater than the costs of making the repairs needed to keep it operational. However, the high cost of repairs and the continued problems caused by the small lock chambers led to a consideration of other possible solutions that might not only be less costly, but also solve the lock size problem. These other possible solutions included not only a consideration of larger lock sizes, but also reconstruction of the projects at other sites that might provide better navigation approach and exit conditions. Both banks of the river from the Point at Pittsburgh up to river mile 41.5 were evaluated as possible project sites with thirteen being identified. The adequacy of each of the sites for navigation purposes was determined by the Corps's Waterway Experiment Station in Vicksburg, Mississippi. Projects at different sites were organized into seven plans consisting of either two or three projects. Costs were developed for each plan that included both the construction cost and the cost of adjusting shoreside facilities for associated pool changes, if appropriate.

The seven plans were reduced to the two best plans, one of which eliminated a project (Plan 1: "2 for 3" Plan) and one which retained three projects (Plan 4: "3 for 3" Plan). Additional analysis was performed which resulted in a variation of the 3 for 3 plan being carried forward for final analysis. The final plans are described below.

Final Plans

Four plans were carried forward for detailed evaluation:

"Without" Plan - least cost method of ensuring reliable and safe operation of existing projects.

Plan 1 - "2 for 3" plan that included the removal of the L&D 3 project and the enlargement of the locks at L&D 4 by the year 2002.

Plan 4 - "3 for 3" plan that included the enlargement of the locks at both L&D 3 and L&D 4 by the year 2002.

Plan 4 Deferred - same as Plan 4 but defers enlargement of the locks at L&D 4 until 2027.

All of the plans involve the replacement or removal of the oldest parts of the structures: the dam at L&D 2 and the locks and dam at L&D 3. They also include the retention of the newest: the dam at L&D 4 and the locks at L&D 2. The plans differ with regard to the size of the locks, the removal or replacement of L&D 3, and the timing for reconstruction of the locks at L&D 4. The "Without" Plan retains the existing small locks whereas the other plans provide twin 84′ x 720′ locks. Plan 1 and Plan 4 include the reconstruction of the locks at L&D 4 by the year 2002 while the other two plans schedule this work around the year 2027. Table 2 provides a summary of these plans and the advantages and disadvantages of each.

Table 1
Summary of Alternative Plans

Alternative	Description	Comment
1. Without Total cost: $739.3 million Non-Federal cost: $0.0 million **Net benefits:** $208.8 million	**Dam 2** - reconstruct fixed crest dam by 2002. **Locks 2** - rehabilitate by 2022. **Dam 3** - reconstruct by 2002. **Locks 3** - reconstruct by 2002. **Dam 4** - minor work. **Locks 4** - rehabilitate in 2002 and replace by 2027.	**Advantages:** 1. Provides for safe and reliable navigation. 2. Minimum environmental and socio-economic impacts due to construction. **Disadvantages:** 1. Small locks at L&Ds 3 and 4 continue to restrict traffic.
2. Plan 1 Total cost: $734.7 million Non-Federal cost: $111.2 million **Net benefits:** $230.9 million	**Dam 2** - construct gated dam by 2002. **Locks 2** - rehabilitate by 2022. **Pool 2** - raise 5'. **Dam 3** - remove by 2002. **Locks 3** - remove by 2002. **Pool 3** - lower 3.2'. **Dam 4** - minor work. **Locks 4** - replace with twin 84'x720' locks by 2002.	**Advantages:** 1. Provides for safe and reliable navigation. 2. Reduces transportation costs due to larger locks and elimination of one lockage cycle. 3. Provides longer pool for boaters. 4. Saves cost of reconstructing L&D 3. **Disadvantages:** 1. Requires adjustment of numerous shoreside facilities. 2. Many adjustment costs borne by individual and local business. 3. Removal of L&D 3 reduces aeration of river.

2. Plan 4 Total cost: $742.2 million Non-Federal cost: $10.3 million **Net benefits:** $222.1 million	**Dam 2** - reconstruct fixed crest dam by 2002. **Locks 2** - rehabilitate by 2022. **Dam 3** - reconstruct by 2002. **Locks 3** - replace with twin 84'x720' locks by 2002. **Dam 4** - minor work. **Locks 4** - replace with twin 84'x720' locks by 2002.	**Advantages:** 1. Provides for safe and reliable navigation. 2. Reduces transportation costs due to larger locks. 3. Has minor affect on shoreside facilities and on water quality. **Disadvantages:** 1. Requires three lockage cycles due to reconstruction of L&D 3.
2. Plan 4 Deferred Total cost: $794.8 million Non-Federal cost: $10.3 million **Net benefits:** $225.8 million	**Dam 2** - reconstruct fixed crest dam by 2002. **Locks 2** - rehabilitate by 2022. **Dam 3** - reconstruct by 2002. **Locks 3** - replace with twin 84'x720' locks by 2002. **Dam 4** - minor work. **Locks 4** - rehabilitate locks by 2002 and replace with twin 84'x720' locks by 2027.	**Advantages:** 1. Provides for safe and reliable navigation. 2. Large cost of constructing Locks 4 is deferred. 3. Eventually results in modernization of system. 4. Has minor affect on shoreside facilities and on water quality. **Disadvantages:** 1. Locks 4 continue to restrict traffic until 2027. 2. Requires three lockage cycles due to reconstruction of L&D 3.

Tentatively Selected Plan

Upon due consideration of the costs, benefits, environmental and socio-economic impacts of the alternatives, Plan 1 ("2 for 3") was tentatively selected as the best plan for the Lower Monongahela River Navigation System. Plan 1 includes the construction of a gated dam at L&D 2, raising Pool 2 by 5 feet, removing the L&D 3, lowering Pool 3 by 3.2 feet, and constructing two 84' x 720' locks at L&D 4.

While it did not rank first in all categories, Plan 1 does represent a significant improvement for waterborne transportation. In areas where the plan results in negative impacts, the findings of the study were that these were not unacceptable given the benefits of modernization. In addition, the plan includes environmental features to offset its negative impacts. After consultation with most affected parties, it was felt that Plan 1 was the best plan for construction of a system that is likely to be in place for the next 60 to 100 years.

The major concern with Plan 1 is that it would require significant expenditures by shoreside facilities owners to adjust to the raising of Pool 2 and the lowering of Pool 3. While a portion of the adjustment costs will be borne by the Federal government, the private sector will also bear a share of the costs. A large portion of the adjustments will be in the areas of dock modifications and underwater pipeline relocations. The affected parties have been notified but generally remain supportive of the plan or do not oppose it because of the perceived regional and local benefits for improving the system. Thus far, the plan has not generated much opposition in spite of the need for shoreside adjustments.

The second area of concern was the possibility of adverse environmental impacts. The most significant impact of Plan 1 would be the loss of Dam 3, which currently provides incidental water quality benefits and a tailwater fishery. While this is an unavoidable consequence of the plan to reduce the number of navigation projects, environmental features have been included to compensate, as much as possible, for the impacts of the removal of Dam 3.

Public Participation

The public meeting and Information Centers are part of a public involvement program developed to keep the public informed and to solicit opinions on the plans and activities of the Corps of Engineers. This announcement has been distributed to individuals, agencies, and organizations with potential interest in the study. If you know of anyone else who would be interested, please share the information you have received or inform us so that we can send them an announcement.

We hope that you will visit one of the Information Centers and attend the October public meeting. For your convenience, copies of the draft report will be available for review at each Center and also at the following locations:

Braddock Carnegie Library
419 Library St.

Carnegie Free Library of McKeesport
1507 Library Ave.

Glassport - Weiss Library
532 Monongahela Ave.

Clairton Public Library
616 Miller Ave.

Monessen Public Library
326 Donner Ave.

Monongahela Area Library
813 W. Main St.

Charleroi - J K Tenner Library
638 Fallowfied Ave.

Donora Public Library
676 McKean Ave.

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Municipal Building
4th & Lincoln

If you have questions concerning the Information Centers or the Public Meeting, please contact:

Mr. Herb Wise
Planning Division
U.S. Army Corps of Engineers
1000 Liberty Avenue
Pittsburgh, PA 15222
(412) 644-6921

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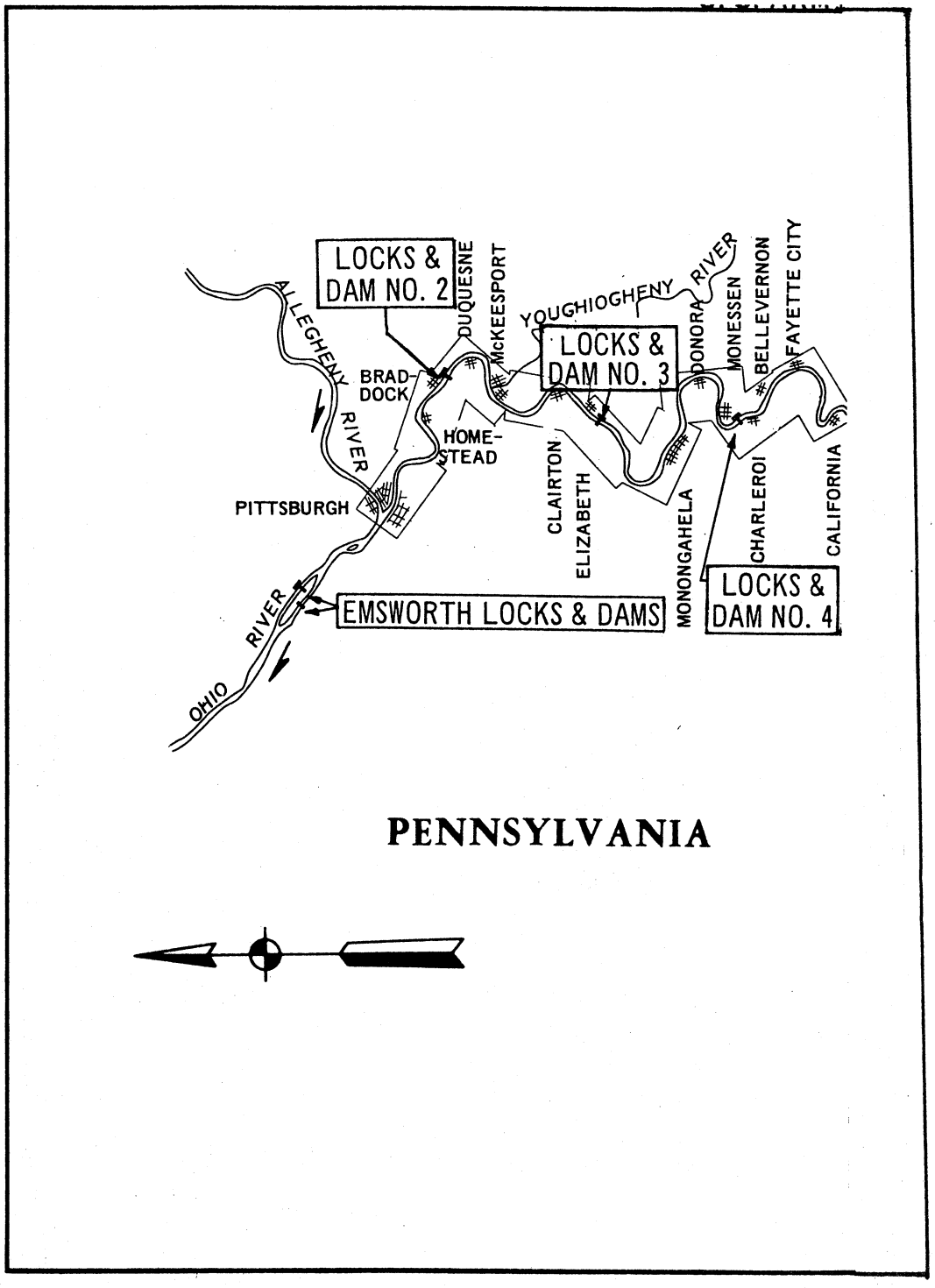
Plate 1

Lower Monongahela River Navigation System

Location of Projects and Adjacent Communities



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U.S. ARMY

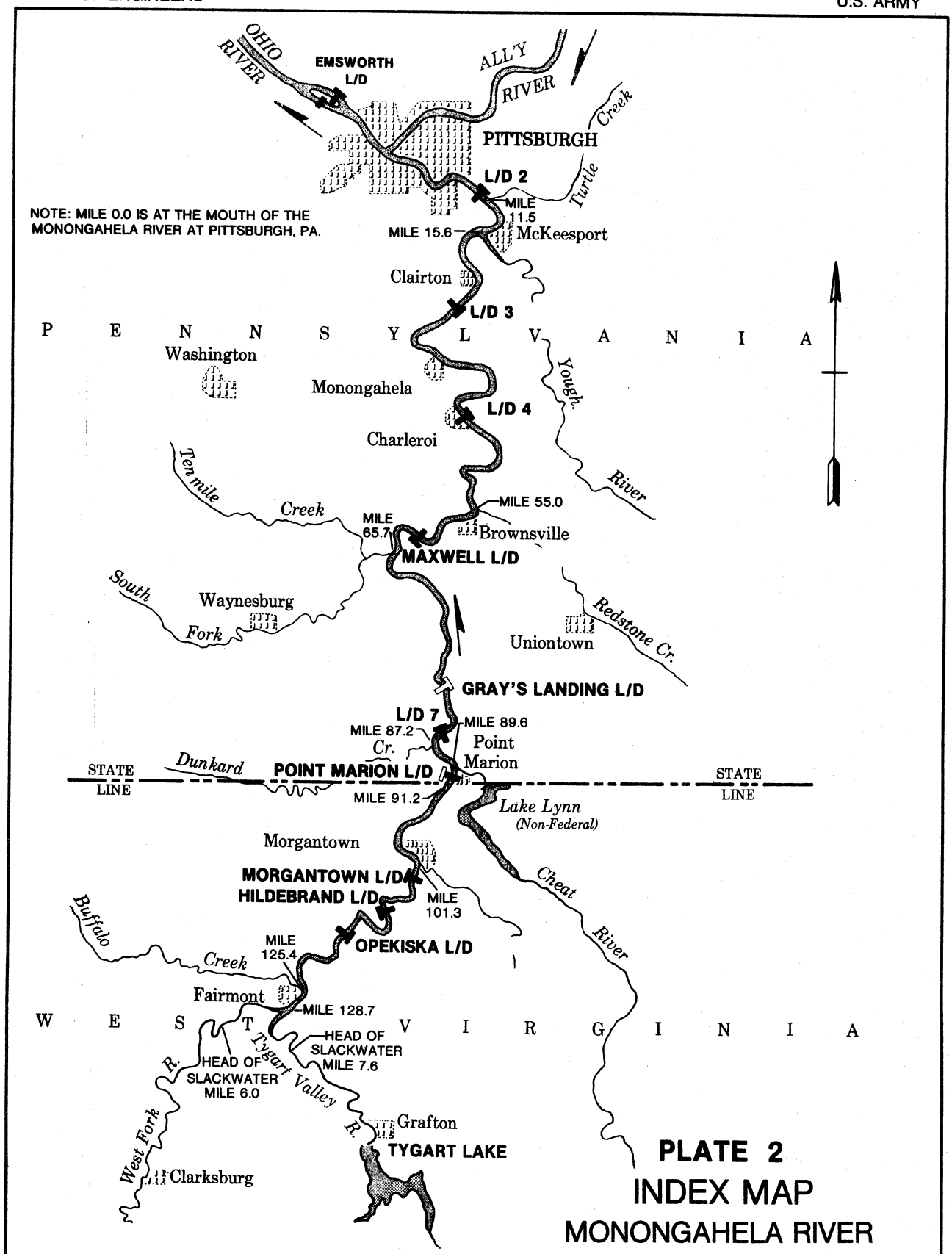

PLATE 2

INDEX MAP

MONONGAHELA RIVER

RIVER & HARBOR PROJECT

SCALE OF MILES

5 0 5 10 15 20

PITTSBURGH DISTRICT, PITTSBURGH, PA.

Revised: 30 September 1986

ATTACHMENT 4

MAILING LIST

LABEL	NAME	ADDRESS	CITY
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1, 4	Honorable John E. Peterson State Senator	25th District 117 E State Street, Box 289	Pleasantville PA 16341
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1, 4	Honorable J. Doyle Corman State Senator	34th District 817 E. Bishop Street, Box 476	Bellefonte PA 16823
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1, 4	Honorable Patrick J. Stapleton State Senator	41st District 581 Philadelphia Street	Indiana PA 15701
1, 4	Honorable Michael M. Dawida State Senator	43rd District 314 East Eighth Avenue	Homestead PA 15120
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2, 4	Honorable David K. Levansky State Representative	39th District, Allegheny Co. 117 Second Street	Elizabeth PA 15037
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2, 4	Honorable Rom Gamble State Representative	44th District, Allegheny Co. 23 State Street	Oakdale PA 15071
2, 4	Honorable Fred A. Trello State Representative	45th District, Allegheny Co. 1004 Fifth Avenue	Coraopolis PA 15108
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2, 4	Honorable Richard A. Kasunic State Representative	52nd District, Fayette Co. RD 1	Dunbar PA 15431
2, 4	Honorable H. William DeWeese State Representative	50th District, Greene Co. Fort Jackson Hotel	Waynesburg PA 15370
2, 4	Honorable Victor J. Lescovitz State Representative	46th District, Washington Co. 141 S. Main Street, Room 6	Burgettstown PA 15021
2, 4	Honorable Leo J. Trich, Jr. State Representative	47th District, Washington Co. 90 W. Chestnut Street	Washington PA 15301
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2, 4	Honorable Thomas A. Tangretti State Representative	57th District, Westmoreland Co 327 S. Main Street	Greensburg PA 15601
2, 4	Honorable Herman Mihalich State Representative	58th District, Westmoreland Co 1134 Knox Avenue	Monessen PA 15062
3, 4	Honorable William J. Coyne US Representative in Congress	Wm. S. Moorhead Fed. Bldg. 1000 Liberty Avenue	Pittsburgh PA 15222
3, 4	Honorable William J. Coyne US House of Representatives	2455 Rayburn House Office Bldg	Washington DC 20515

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3, 4	Honorable Rick Santorum US Representative in Congress	200 Fleet Street, Suite 4000	Pittsburgh PA 15220
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3, 4	Honorable Austin J. Murphy US House of Representatives	2210 Rayburn House Ofc. Bldg.	Washington DC 20515
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3, 4	Honorable Joe Kolter US Representative in Congress	1322 Seventh Avenue	Beaver Falls PA 15010
3, 4	Honorable Joe Kolter US House of Representatives	212 Cannon House Office Bldg	Washington DC 20515
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3, 4	Honorable John P. Murtha US House of Respresentatives	2423 Rayburn House Ofc Bldg	Washington DC 20515
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3, 5	Honorable Harley O. Staggers US House of Representatives	2313 Longworth House Ofc Bldg	Washington DC 20515
3, 5	Honorable Harley O. Staggers US Representative in Congress	Staggers Fed. Bldg., Rm 211 75 High Street	Morgantown WV 26507
4, 5	 WV Field Office	US Fish & Wildlife Service PO Box 1278	Elkins WV 26241
4, 9	Ms. Sherry Morgan US Fish & Wildlife Service	Suite 700 1 Gateway Center	Newton Center MA 2158
4, 9	Chief Eastern Field Operation Center	US Bureau of Mines 4800 Forbes Avenue	Pittsburgh PA 15213
4, 9	Captain of the Port US Coast Guard	Post Operations Branch Suite 700 Kossman Building	Pittsburgh PA 15222
4, 9	Mr. Charles J. Kulp Field Supervisor	US Fish & Wildlife Service 315 South Allen Street	State College PA 16801

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4, 9	District Chief Water Res Div	US Geological Survey PO Box 1107	Harrisburg PA 17108
4, 9	State Conservationist Soil Conservation Service	US Department of Agriculture Box 985 Federal Square Station	Harrisburg PA 17108
4, 9	Administrator Region III	US Dept Housing & Urban Dev 6th & Walnut Streets	Philadelphia PA 19106
4, 9	Director Mod-Atlantic Region	National Park Service 143 South Third Street	Philadelphia PA 19106
4, 9	Chief Environmental Planning Section	US EPA, Region III 841 Chestnut Street	Philadelphia PA 19107
4, 9	Mr. Don Klima, Chief Eastern Div of Project Review	Advisory Council on Hist Pres 1100 Pennsylvania Avenue, NW	Washington DC 20004
4, 9	Asst Sec, Program Policy ATTN: Dir, Ofc Env Proj Rev	US Department of Interior	Washington DC 20240
4, 9	Coordinator, Water Resources G-WS/73	US Dept of Transportation 400 Seventh Street, SW	Washington DC 20590
4, 9	Region III Administrator	Federal Highway Administration 1629 Hopkins Plaza	Baltimore MD 21201
4, 9	Field Representative Forestry Sciences Laboratory	US Forest Service 180 Canfield Street	Morgantown WV 26505
4, 9	US Coast Guard, 2nd District Attn: Commander	Robert A. Young Bldg Room NR 2.107 1222 Spruce St.	St Louis MO 63103
5, 4	Mr. Richard Lorson Area Fisheries Manager	 RD 2, Box 79	Somerset PA 15501
5, 5	WV Dept of Natural Resources Wildlife Division	Attn: Kerry D. Bledsoe 1304 Goose Run Road	Fairmont WV 26554
5, 9	Mr. Lawrence Busack Bureau of Dams & Waterway Mgt	PA Dept of Environmental Res RD 1, 482, Rt 30	Clinton PA 15026
5, 9	Mr. Charles Duritsa, Director Environmental Protection Ofc	PA Dept of Environmental Res 121 South Highland Avenue	Pittsburgh PA 15206
5, 9	Mr. Donald Madl, Supervisor Southwest Division	Pennsylvania Game Commission 339 West Main Street	Ligonier PA 15658
5, 9	Mr. John Arway, Chief Div of Environmental Services	Pennsylvania Fish Commission 450 Robinson Lane	Bellefonte PA 16823
5, 9	Mr. Kurt Carr, Chief Div of Archaeology & Protect	PA BHP Box 1026	Harrisburg PA 17108
5, 9	Mr. Greg Grabowicz, Chief Div of Env Assmt & Minerals	Pennsylvania Game Commission 2001 Elmerton Avenue	Harrisburg PA 17110

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5, 9	Secretary's Office of Policy	PA Dept of Environmental Res PO Box 2063	Harrisburg PA 17120
5, 9	Mr. Jim Ulanoski PA DER	11th Floor, Fulton Building PO Box 2063	Harrisburg PA 17120
5, 9	Ohio River Valley Water Sanitation Commission	49 East 4th Street Suite 300	Cincinnati OH 45202
6, 4	Honorable Robert P. Casey Governor of Pennsylvania	225 Main Capitol Building	Harrisburg PA 17105
6, 5	Honorable Gaston Caperton Governor	State of West Virginia	Charleston WV 25301
7, 4	Honorable Arlen Spector U S Senator	2031 Wm S Moorhead Fed Bldg 1000 Liberty Avenue	Pittsburgh PA 15222
7, 4	Honorable Harris Wofford U S Senator	Liberty Center, Room 1306 1001 Liberty Avenue	Pittsburgh PA 15222
7, 4	Honorable Arlen Spector U S Senate	303 Hart Senate Ofc Bldg	Washington DC 20510
7, 4	Honorable Harris Wofford U S Senate	277 Russell Senate Ofc Bldg	Washington DC 20510
7, 5	Honorable John D Rockefeller US Senate	724 Hart Senate Office Bldg	Washington DC 20510
7, 5	Honorable Robert C Byrd US Senate	311 Hart Senate Office Bldg	Washington DC 20510
7, 5	Honorable John D Rockefeller US Senator	Suite 200, L & S Building 812 Quarrier Street	Charleston WV 25301
7, 5	Honorable Robert C Byrd US Senate	Room 1019 500 Quarrier Street	Charleston WV 25301
9, 4	Executive Director Turtle Creek Watershen Assoc.	700 Braddock Avenue	East Pittsburgh PA 15112
9, 4	Brilliant Boat Club	Foot of Washington Blvd	Pittsburgh PA 15206
9, 4	President Greater Pittsburgh	Aquatic Club Box 9304	Neville Island PA 15225
10, 4	President	Kozel Engineering Company 339 Bldv of the Allies	Pittsburgh PA 15222
10, 4	Executive Director SW PA Regional Planning Comm	The Waterfront 200 First Avenue	Pittsburgh PA 15222
10, 4	President	Swindell Rust 441 Smithfield Street	Pittsburgh PA 15222

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10, 4	President	Chester Engineers, Inc PO Box 9356	Pittsburgh PA 15225
11, 4	Chairman of Commissioners	Allegheny County City-County Building	Pittsburgh PA 15219
11, 4	Chief Clerk	Allegheny County 101 Courthouse Grant Street	Pittsburgh PA 15219
11, 4	Chairman of Commissioners	Fayette County Courthouse	Uniontown PA 15401
11, 4	Chairman of Commissioners	Greene County County Office Building	Waynesburg PA 1537
11, 4	Chief Clerk	Greene County Courthouse	Waynesburg PA 15370
11, 4	Chairman of Commissioners	Washington County County Courthouse	Washington PA 15301
11, 4	Director of Administration	Westmoreland County 101 Courthouse Square	Greensburg PA 15601
11, 4	Director, Planning Commission	Westmoreland County Courthouse Square	Greensburg PA 15601
11, 5	Chairman of Commissioners	Monongalia County Courthouse, High Street	Morgantown WV 26505
11, 5	County Clerk	Monongalia County County Courthouse	Morgantown WV 26505
11, 9	Mr. Thomas Foerster Chairman of Commissioners	Allegheny County City-County Building	Pittsburgh PA 15219
12, 4	Mayor	Borough of Bradford Woods Chestnut Road	Bradford Woods PA 15015
12, 4	Mayor	Borough of Cheswick 1403 Sherman Street	Cheswick PA 15024
12, 4	Mayor	Borough of Clairton City Hall	Clairton PA 15025
12, 4	Chairman Board of Supervisors	South Versailles Township Box 66	Coulters PA 15028
12, 4	Chairman Board of Trustees	East Deer Township 927 Freeport Road	Creighton PA 15030
12, 4	Mayor	Borough of Dravosburg PO Box 37	Dravosburg PA 15034
12, 4	Mayor	Borough of East McKeesport 1217 Fifth Avenue	East McKeesport PA 15035

LABEL	NAME	ADDRESS	CITY
12, 4	Mayor	Borough of Elizabeth 822 Sixth Avenue	Elizabeth PA 15037
12, 4	Mayor	Borough of Glassport 5th & Monongahela Ave	Glassport PA 15045
12, 4	Chairman Board of Supervisors	Crescent Township PO Box 466	Glenwillard PA 15046
12, 4	Chairman Board of Supervisors	Springdale Township Box 177	Harwick PA 15049
12, 4	Chairman Board of Supervisors	Indiana Township PO Box 153	Indianola PA 15051
12, 4	Mayor	Borough of Leetsdale 8 Beech Court	Leetsdale PA 15056
12, 4	Chairman Board of Supervisors	North Fayette Township	McDonald PA 15057
12, 4	Chairman Board of Supervisors	Forward Township RD 3, Box 40-A	Monongahela PA 15063
12, 4	Chairman Board of Supervisors	South Fayette Township Drawer 515	Morgan PA 15064
12, 4	Mayor	Borough of Brackenridge 1621C Union Avenue	Natrona Heights PA 15065
12, 4	Chairman Board of Supervisors	Harrison Township Municipal Drive, PO Box 376	Natrona Heights PA 15065
12, 4	Mayor	Borough of Oakdale Western Avenue	Oakdale PA 15071
12, 4	Chairman Board of Supervisors	West Deer Township Box 2	Russellton PA 15076
12, 4	Mayor	Borough of Tarentum 304 Lock Street	Tarentum PA 15084
12, 4	Chairman Board of Supervisors	Fawn Township RD 2 Box 365C	Tarentum PA 15084
12, 4	Chairman Board of Supervisors	Frazier Township RD 1, Box 410, Butler Logan Rd	Tarentum PA 15084
12, 4	Chairman Board of Supervisors	Marshall Township Box 94	Warrendale PA 15086
12, 4	Mayor	Borough of West Elizabeth Viola Street	West Elizabeth PA 15088
12, 4	Chairman Board of Supervisors	Elizabeth Township	West Mewton PA 15089

LABEL	NAME	ADDRESS	CITY
12, 4	Chairman Board of Supervisors	McCandless Township 9955 Grubbs Road	Wexford PA 15090
12, 4	Chairman Board of Supervisors	Pine Township	Wexford PA 15090
12, 4	Chairman Board of Supervisors	Hampton Township 3101 McCully Road	Allison Park PA 15101
12, 4	Mayor	Borough of Bethel Park 1155 Woodlawn Avenue	Bethel Park PA 15102
12, 4	Mayor	Borough of Braddock 415 Sixth Street	Braddock PA 15104
12, 4	Mayor	Borough of North Braddock 600 Anderson Street	Braddock PA 15104
12, 4	Mayor	Borough of Rankin 320 Hawkins Avenue	Rankin PA 15104
12, 4	Borough Manager	Borough of Carnegie 1 Glass Street	Carnegie PA 15106
12, 4	Mayor	Borough of Rosslyn Farms Winthrop Road	Carnegie PA 15106
12, 4	Chairman Board of Supervirors	Collier Township 81 Noblestown Road	Carnegie PA 15106
12, 4	Chairman Board of Supervisors	Scott Township 2600 Old Greentree Road	Carnegie PA 15106
12, 4	Mayor	Borough of Coraopolis 1817 Montour Street	Coraopolis PA 15108
12, 4	Chairman Board of Supervisors	Moon Township 1000 Beaver Grage Road	Coraopolis PA 15108
12, 4	Mayor	City of Duquesne 12 South Second Street	Duquesne PA 15110
12, 4	Mayor	Borough of Chalfant 307 Lunnwood Avenue	East Pittsburgh PA 15112
12, 4	Mayor	Borough of East Pittsburgh 509 Ridge Avenue	East Pittsburgh PA 15112
12, 4	Chairman Board of Supervisors	Shaler Township	Glenshaw PA 15116
12, 4	Mayor	Borough of Homestead PO Box 448	Homestead PA 15120
12, 4	Mayor	Borough of Munhall 1900 West Street	Munhall PA 15120

LABEL	NAME	ADDRESS	CITY
12, 4	Mayor	Borough of West Homestead 401 West 8th Avenue	West Homestead PA 15120
12, 4	Mayor	Borough of Whitaker 177 Magnola Street	Whitaker PA 15120
12, 4	Chariman Board of Supervisors	South Park Township 6205 Pleasant Street	Liberty PA 15129
12, 4	Mayor	City of McKeesport 201 Lysle Boulevard	McKeesport PA 15132
12, 4	Mayor	Borough of Liberty 805 Elizabeth Street	McKeesport PA 15133
12, 4	Mayor	Borough of Port Vue 1015 Woodland Avenue	Port Vue PA 15133
12, 4	Mayor	Borough of McKees Rocks Linden and Bell Avenues	McKees Rocks PA 15136
12, 4	Chairman Board of Supervisors	North Versailles Township 100 Cornelia Street	North Versaille PA 15137
12, 4	Mayor	Borough of Oakmont 524 Washington Avenue	Oakmont PA 15139
12, 4	Mayor	Borough of Pitcairn 618 Taylor Avenue	Pitcairn PA 15140
12, 4	City Manager	Borough of Edgeworth 301 Beaver Road	Sewickley PA 15143
12, 4	Mayor	Borough of Belle Acres RD 6	Sewickley PA 15143
12, 4	Mayor	Borough of Glenfield 158 East Beaver Street	Sewickley PA 15143
12, 4	Mayor	Borough of Haysville 18 River Road	Haysville PA 15143
12, 4	Mayor	Borough of Osborne David Lane, Osborne	Sewickley PA 15143
12, 4	Mayor	Borough of Sewickley Heights 601 Thorn Street	Sewickley PA 15143
12, 4	Mayor	Borough of Sewickley Hills Fairhill Road, RD 6	Sewickley PA 15143
12, 4	Chairman Board of Supervisors	Aleppo Township 101 Timber Lane Drive	Sewickley PA 15143
12, 4	Chairman Board of Supervisors	Leets Township 7 Leet Street	Sewickley PA 15143

LABEL	NAME	ADDRESS	CITY
12, 4	Mayor	Borough of Springdale 325 School Street	Springdale PA 15144
12, 4	Mayor	Borough of Turtle Creek 125 Monroeville Boulevard	Turtle Creek PA 15145
12, 4	Chairman Board of Supervisors	Wilking Township 110 Peffer Road	Turtle Creek PA 15145
12, 4	Mayor	Borough of Verona 706 Allegheny River Boulevard	Verona PA 15147
12, 4	Mayor	Borough of Wall 686 Ross Street Extension	Wall PA 15148
12, 4	Mayor	Borough of Wilmerding Station and Commerce Streets	Wilmerding PA 15148
12, 4	Mayor	Borough of Avalon 640 California Avenue	Pittsburgh PA 15202
12, 4	Mayor	Borough of Bellevue 537 Bayne Avenue	Pittsburgh PA 15202
12, 4	Mayor	Borough of Ben Avon 2 Lynton Lane	Pittsburgh PA 15202
12, 4	Mayor	Borough of Emsworth 171 Center Avenue	Emsworth PA 15202
12, 4	Mayor	Borough of Crafton 240 West Steuben Street	Pittsburgh PA 15205
12, 4	Mayor	Borough of Ingram 40 West Prospect Avenue	Pittsburgh PA 15205
12, 4	Mayor	Borough of Thornburg 1124 Cornell Road	Pittsburgh PA 15205
12, 4	Mayor	Borough of Millvale 501 Lincoln Avenue	Millvale PA 15209
12, 4	Chairman Board of Supervisors	Reserve Township 33 Lonsdale Street	Pittsburgh PA 15212
12, 4	Borough Manager	Borough of Aspinwall 217 Commercial Avenue	Aspinwall PA 15215
12, 4	Mayor	Borough of Fox Chapel 101 Wynn Wood Road	Pittsburgh PA 15215
12, 4	Mayor	Borough of Sharpsburg 121 13th Street	Pittsburgh PA 15215
12, 4	Mayor	Borough of Dormont 2975 West Liberty Avenue	Dormont PA 15216

LABEL	NAME	ADDRESS	CITY
12, 4	Mayor	Borough of Swissvale 7560 Roslyn Street	Swissvale PA 15218
12, 4	Mayor	Borough of Greentree 978 Greentree Road	Pittsburgh PA 15220
12, 4	Borough Manager	Borough of Forest Hills 2071 Ardmore Boulevard	Pittsburgh PA 15221
12, 4	Mayor	Borough of Braddock Hills Brinton & Wilkins Roads	Pittsburgh PA 15221
12, 4	Mayor	Borough of Etna 437 Butler Street	Etna PA 15223
12, 4	Chairman Board of Supervisors	Neville Township 247 Von Stein Lane	Pittsburgh PA 15225
12, 4	Mayor	Borough of Baldwin 3344 Churchview Avenue	Pittsburgh PA 15227
12, 4	Mayor	Borough of Brentwood 3624 Brownsville Road	Pittsburgh PA 15227
12, 4	Mayor	Borough of Mount Lebanon 710 Washington Road	Pittsburgh PA 15228
12, 4	Mayor	Borough of West View 441 Perrysville Avenue	Pittsburgh PA 15229
12, 4	Mayor	Borough of Castle Shannon 3170 May Street	Castle Shannon PA 15234
12, 4	Mayor	Municipality of Penn Hills 12245 Frankstown Road	Pittsburgh PA 15235
12, 4	Mayor	Borough of Pleasant Hills 324 Millet Avenue	Pittsburgh PA 15236
12, 4	Mayor	Borough of Whitehall 100 Borough Park Drive	Pittsburgh PA 15236
12, 4	Chairman Board of Supervisors	Ohio Township 1719 Roosevelt Road	Pittsburgh PA 15237
12, 4	Mayor	Borough of Blawnox 930 Center Avenues	Pittsburgh PA 15238
12, 4	Mayor	Borough of Plum 4575 New Texas Road	Pittsburgh PA 15239
12, 4	Chairman Board of Supervisors	Upper ST Clair Township 1820 McLaughlin Run Road	Upper ST Clair PA 15241
12, 4	Chairman Board of Supervisors	Robinson Tonwship Ewing Mill Road	Pittsburgh PA 15244

LABEL	NAME	ADDRESS	CITY
12, 4	Mayor	Borough of Jefferson Box 308, RD 4	Finleyville PA 15332
12, 4	Mayor	Borough of Callimont RD 4, Box C-5	Meyersdale PA 15552
12, 4	Chairman Board of Supervisors	Middlesex Township RD 2	Valencia PA 16059
12, 4	Mayor	Borough of Belle Vernon 59 Sampson Street	Belle Vernon PA 15012
12, 4	Chairman Board of Supervisors	Washington Township 905 Park Avenue	Belle Vernon PA 15012
12, 4	Mayor	City of Uniontown 20 North Gallatin Avenue	Uniontown PA 15401
12, 4	Chairman Board of Supervisors	Georges Township RD 4 Box 170G	Uniontown PA 15401
12, 4	Chairman Board of Supervisors	Menallen Township RD 6, Box 350	Uniontown PA 15401
12, 4	Chairman Board of Supervisors	South Union Township RD 2, Box 623	Uniontown PA 15401
12, 4	Mayor	Borough of Brownsville Municipal Building	Brownsville PA 15417
12, 4	Chairman Board of Supervisors	Luzerne Township 415 Hopewell Road	Brownsville PA 15417
12, 4	Mayor	City of Connellsville Box 698	Connellsville PA 15425
12, 4	Chairman Board of Supervisors	Dunbar Township 71 Oglever Lane	Dunbar PA 15425
12, 4	Mayor	Borough of Dawson PO Box 194	Dawson PA 15428
12, 4	Mayor	Borough of Dunbar 16 First Avenue	Dunbar PA 15431
12, 4	Mayor	Borough of Fairchance 12 North Oak Street	Fairchance PA 15436
12, 4	Chairman Board of Supervisors	Wharton Township PO Box 1	Farmington PA 15437
12, 4	Mayor	Borough of Fayette City 237 Main Street	Fayette City PA 15438
12, 4	Chairman Board of Supervisors	Jefferson Township Jefferson Avenue	Fayette City PA 15438

LABEL	NAME	ADDRESS	CITY
12, 4	Chairman Board of Supervisors	Redstone Township Box 515, RD 1	Grindstone PA 15442
12, 4	Chairman Board of Supervisors	Saltlick Township PO Box 229	Indian Head PA 15446
12, 4	Chairman Board of Supervisors	North Union Township	Lemont Furnace PA 15456
12, 4	Mayor	Borough of Markleysburg PO Box 25	Markleysburg PA 15459
12, 4	Chairman Board of Supervisors	Henry Clay Township RD 1 Box 140	Markleysburg PA 15459
12, 4	Mayor	Borough of Masontown 2 Court Avenue	Masontown PA 15461
12, 4	Chairman Board of Supervisors	Nicholson Township Box 74	Grays Landing PA 15461
12, 4	Mayor	Borough of Newell Morgan Street	Newell PA 15466
12, 4	Mayor	Borough of Ohiopyle	Ohiopyle PA 15470
12, 4	Mayor	Borough of Perryopolis PO Box 326	Perryopolis PA 15473
12, 4	Mayor	Borough of Point Marion 426 Morgantown Street	Point Marion PA 15474
12, 4	Chairman Board of Supervisors	Springhill Township	Point Marion PA 15474
12, 4	Mayor	Borough of Smithfield PO Box 276	Smithfield PA 15478
12, 4	Chairman Board of Supervisors	Franklin Township	Smock PA 15480
12, 4	Chairman Board of Supervisors	Perry Township Box 165	Star Junction PA 15482
12, 4	Mayor	Borough of Vanderbilt	Vanderbilt PA 15486
12, 4	Mayor	Borough of Everson 307 Graff Street	Everson PA 15631
12, 4	Chairman Board of Supervisors	Bullskin Township	Mt Pleasant PA 15666
12, 4	Chairman Board of Supervisors	Upper Tyrone Township	Scottdale PA 15683

LABEL	NAME	ADDRESS	CITY
12, 4	Chairman Board of Supervisors	Allepo Township	Allepo PA 15310
12, 4	Mayor	Borough of Carmichaels 200 South Market Street	Carmichaels PA 15320
12, 4	Chairman Board of Supervisors	Cumberland Township 100 Municipal Road	Carmichaels PA 15320
12, 4	Chairman Board of Supervisors	Greene Township RD 1, Box 150-B	Carmichaels PA 15320
12, 4	Mayor	Borough of Clarksville Box 34	Clarksville PA 15322
12, 4	Chairman Board of Supervisors	Morris Township	Prosperity PA 15329
12, 4	Chairman Board of Supervisors	Washington Township RD 2	Prosperity PA 15329
12, 4	Chairman Board of Supervisors	Gray Township	Graysville PA 15337
12, 4	Mayor	Borough of Greensboro	Greensboro PA 15338
12, 4	Chairman Board of Supervisors	Monongahela Township	Greensboro PA 15338
12, 4	Chairman Board of Supervisors	Jackson Township	Holbrook PA 15341
12, 4	Chairman Board of Supervisors	Richhill Township	Holbrook PA 15341
12, 4	Mayor	Borough of Jefferson Box 128	Jefferson PA 15344
12, 4	Chairman Board of Supervisors	Perry Township	Mt. Morris PA 15349
12, 4	Chairman Board of Supervisors	Springhill Township	New Freeport PA 15352
12, 4	Chairman Board of Supervisors	Gilmore Township Box 91	Pine Bank PA 15354
12, 4	Chairman Board of Supervisors	Jefferson Township	Rices Landing PA 15357
12, 4	Chairman Board of Supervisors	Wayne Township	Spraggs PA 15362
12, 4	Mayor	Borough of Rice Landing RD 1	Rice Landing PA 15370

LABEL	NAME	ADDRESS	CITY
12, 4	Chairman Board of Supervisors	Franklin Township RD 4, Box 161-A	Waynesburg PA 15370
12, 4	Mayor	Borough of Burgettstown 33 Dinsmore Avenue	Burgettstown PA 15021
12, 4	Chairman Board of Supervisors	Hanover Township RD 1, Box 146-N	Burgettstown PA 15021
12, 4	Mayor	Borough of Charleroi 4th and Fallowfield Avenue	Charleroi PA 15022
12, 4	Mayor	Borough of North Charleroi 555 Walnut Street	North Charleroi PA 15022
12, 4	Mayor Borough of Speers	300 Phillips Street Speers Hill	Charleroi PA 15022
12, 4	Chairman Board of Supervisors	Fallowfield Township RD 2, Box 475	Charleroi PA 15022
12, 4	Mayor	Borough of Donora 603 Meldon Avenue	Donora PA 15033
12, 4	Chairman Board of Supervisors	Jefferson Township	Eldersville PA 15036
12, 4	Mayor	Borough of McDonald 333 Station Street	McDonald PA 15057
12, 4	Chairman Board of Supervisors	Cecil Township RD 3	McDonald PA 15057
12, 4	Chairman Board of Supervisors	Robinson Township RD 4, PO Box 92	McDonald PA 15057
12, 4	Mayor	Borough of Midway	Midway PA 15060
12, 4	Mayor	City of Monongahela 449 West Main Street	Monongahela PA 15063
12, 4	Mayor	Borough of New Eagle 443 4th Avenue	New Eagle PA 15067
12, 4	Mayor	Borough of East Washington 15 Thayer Street	Washington PA 15301
12, 4	Mayor	City of Washington 55 West Maiden Street	Washington PA 15301
12, 4	Chairman Board of Supervisors	Canton Township	Washington PA 15301
12, 4	Chairman Board of Supervisors	North Franklin Township 620 Franklin Farms Road	Washington PA 15301

LABEL	NAME	ADDRESS	CITY
12, 4	Chairman Board of Supervisors	South Strabane Township 550 Washington Road	Washington PA 15301
12, 4	Chairman Board of Supervisors	Blaine Township	Avella PA 15312
12, 4	Chairman Board of Supervisors	Cross Creek Township RD 2	Avella PA 15312
12, 4	Mayor	Borough of Bentleyville	Bentleyville PA 15314
12, 4	Mayor	Borough of Canonsburg 68 East Pike Street	Caninsburg PA 15317
12, 4	Chairman Board of Supervisors	North Strabane Township RD 1, Box 132 - RT 519	Canonsburg PA 15317
12, 4	Chairman Board of Supervisors	Peters Township 610 East McMurray Road	McMurray PA 15317
12, 4	Chairman Board of Supervisors	Buffalo Township	Claysville PA 15323
12, 4	Chairman Board of Supervisors	Donegal Township RD 3	Claysville PA 15323
12, 4	Mayor	Borough of Cokeburg 161 Lincoln	Cokeburg PA 15324
12, 4	Chairman Board of Supervisors	Morris Township RD 1, Box 173-B	Prosperity PA 15329
12, 4	Chairman Board of Supervisors	Somerset Township	Eighty Four PA 15330
12, 4	Mayor	Borough of Ellsworth 39 North Pine Street	Ellsworth PA 15331
12, 4	Mayor	Borough of Finleyville	Finleyville PA 15332
12, 4	Chairman Board of Supervisors	Nottingham Township RD 2, Little Mingo Road	Finleyville PA 15332
12, 4	Mayor	Borough of Deemston RD 1 - Box 52	Fredericktown PA 15333
12, 4	Chairman Board of Supervisors	East Bethlehem Township PO Box 687	Fredericktown PA 15333
12, 4	Chairman Board of Supervisors	Union Township Box 43	Gastonville PA 15336
12, 4	Chairman Board of Supervisors	Mt. Pleasant Township PO Box 128	Hickory PA 15340

LABEL	NAME	ADDRESS	CITY
12, 4	Mayor	Borough of Houston 42 Western Avenue	Houston PA 15342
12, 4	Mayor	Borough of Marianna 1012 Beason Avenue	Marianna PA 15345
12, 4	Chairman Board of Supervisors	Amwell Township RD 1, Box 151	Marianna PA 15345
12, 4	Chairman Board of Supervisors	West Bethlehem Township RD 1, Box 337	Marianna PA 15345
12, 4	Mayor	Borough of West Alexander Main Street	West Alexander PA 15376
12, 4	Chairman Board of Supervisors	East Findley Township RD 2, Box 133	West Findley PA 15377
12, 4	Mayor	Borough of West Middletown Box 14	West Middletown PA 15379
12, 4	Mayor	Borough of Allenport Box 173	Allenport PA 15412
12, 4	Mayor	Borough of Centerville 725 Old National Pike	Brownsville PA 15417
12, 4	Mayor	Borough of West Brownsville Main Street	West Brownsvill PA 15417
12, 4	Mayor	Borough of California 3rd Street	California PA 15419
12, 4	Mayor	Borough of Long Branch RD 1	Coal Center PA 15423
12, 4	Chairman Board of Supervisors	West Pike Run Township Box 243	Daisytown PA 15427
12, 4	Mayor	Borough of Dunlevy Box 70	Dunlevy PA 15432
12, 4	Mayor	Borough of Elco	Elco PA 15434
12, 4	Mayor	Borough of Stockdale 461 Bow Street	Stockdale PA 15483
12, 4	Mayor	Borough of North Belle Vernon 106 Baltimore Street	Belle Vernon PA 15012
12, 4	Chairman Board of Supervisors	Rostraver Township Municipal Building	Belle Vernon PA 15012
12, 4	Mayor	City of Monessen Municipal Building	Monessen PA 15062

LABEL	NAME	ADDRESS	CITY
12, 4	Mayor	City of Arnold 1829 Fifth AVenue	Arnold PA 15068
12, 4	Mayor	City of Lower Burrell Bethel & Schreiber	Lower Burrell PA 15068
12, 4	Mayor	City of New Kensington 2400 Leechburg Road	New Kensington PA 15068
12, 4	Chairman Board of Supervisors	Upper Burrell Township 3735 Seventh Street	New Kensington PA 15068
12, 4	Mayor	Borough of Sutersville Miller & Marion Avenues	Sutersville PA 15083
12, 4	Mayor	Borough of Trafford Municipal Building	Trafford PA 15085
12, 4	Chairman Board of Supervisors	Penn Township	Trafford PA 15085
12, 4	Mayor	Borough of West Newton 112 South Water Street	West Newton PA 15089
12, 4	Chairman Board of Supervisors	South Huntongdon Township	West Newton PA 15089
12, 4	Mayor	Borough of South Greensburg 717 Maca Street	Greensburg PA 15601
12, 4	Mayor	City of Greensburg 418 South Main Street	Greensburg PA 15601
12, 4	Chairman Board of Supervisors	East Huntingdon Township Box 9	Alverton PA 15612
12, 4	Mayor	Borough of Oklahoma 205 Vista Drive	Apollo PA 15613
12, 4	Chairman Board of Supervisors	Washington Township	Apollo PA 15613
12, 4	Mayor	Borough of Arona Main Street	Arona PA 15617
12, 4	Mayor	Borough of Delmont	Delmont PA 15626
12, 4	Chairman Board of Supervisors	Derry Township 650 Derry Road	Derry PA 15627
12, 4	Mayor	Borough of Donegal	Donegal PA 15628
12, 4	Mayor	Borough of East Vandergrift 338 McKinley Avenue	East Vandergrif PA 15629

LABEL	NAME	ADDRESS	CITY
12, 4	Mayor	Borough of Export	Export PA 15632
12, 4	Mayor	Borough of Hunker PO Box 350	Hunker PA 15639
12, 4	Mayor	Borough of Hyde Park Second Street	Hyde Park PA 15641
12, 4	Mayor	Borough of Irwin	Irwin PA 15642
12, 4	Mayor	Borough of North Irwin 99 Lincoln Avenue	North Irwin PA 15642
12, 4	Chairman Board of Supervisors	North Huntingdon Township 11279 Center Highway	N Huntingdon PA 15642
12, 4	Mayor	Borough of Jeannette 2nd and Clay Avenue	Jeannette PA 15644
12, 4	Mayor	Borough of Latrobe PO Box 829	Latrobe PA 15650
12, 4	Chairman Board of Supervisors	Unity Township RD 3, Box 526-K	Latrobe PA 15650
12, 4	Mayor	Borough of West Leechburg 104 Jay Street RD 4	Leechburg PA 15656
12, 4	Mayor	Borough of Ligonier PO Box 315	Ligonier PA 15658
12, 4	Chairman Board of Supervisors	Ligonier Township RD 5, Box 239	Ligonier PA 15658
12, 4	Mayor	Borough of Madison	Madison PA 15663
12, 4	Chairman Board of Supervisors	Mount Pleasant Township Box 158	Mammoth PA 15664
12, 4	Mayor	Borough of Manor Race Street	Manor PA 15665
12, 4	Mayor	Borough of Mt. Pleasant	Mt. Pleasant PA 15666
12, 4	Mayor	Borough of Murraysville 4697 Newlons Drive East	Murraysville PA 15668
12, 4	Mayor	Borough of New Alexandria Main Street	New Alexandria PA 15670
12, 4	Mayor	Borough of New Stanton PO Box 55	New Stanton PA 15672

LABEL	NAME	ADDRESS	CITY
12, 4	Mayor	Borough of Penn Box 292	Penn PA 15675
12, 4	Chairman Board of Supervisors	Bell Township Box D	Salina PA 15680
12, 4	Mayor	Borough of Scottdale 804 Arthur Avenue	Scottdale PA 15683
12, 4	Chairman Board of Supervisors	Cook Township	Stallstown PA 15687
12, 4	Mayor	Borough of Vandergrift Municipal Building	Vandergrift PA 15690
12, 4	Mayor	Borough of Youngwood 1040 Depot Street	Youngwood PA 15697
12, 4	Mayor	Borough of Bolivar PO Drawer C	Bolivar PA 15923
12, 4	Chairman Board of Supervisors	Fairfield Township RD 1	Bolivar PA 15923
12, 4	Mayor	Borough of New Florence 15th Street	New Florence PA 15944
12, 4	Mayor	Borough of Seward Box 323	Seward PA 15954
12, 5	Mayor	City of Morgantown 389 Spruce Street	Morgantown WV 26505
12, 5	Mayor	City of Westover 13 Cottage Street	Westover WV 26505
12, 5	Mayor	Town of Star City 3446 University Avenue	Star City WV 26505
12, 5	Mayor	Town of Osage	Osage WV 26543
12, 9	Ms. Ellen G. Kight Southwest Regional Director	PA Dept of Community Affairs Rm 412, 300 Liberty Avenue	Pittsburgh PA 15222
13, 4	Postmaster		Bairdford PA 15006
13, 4	Postmaster		Bakerstown PA 15007
13, 4	Postmaster		Brackenridge PA 15014
13, 4	Postmaster		Bradford Woods PA 15015

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Bridgeville PA 15017
13, 4	Postmaster		Buena Vista PA 15018
13, 4	Postmaster		Bunola PA 15020
13, 4	Postmaster		Cheswick PA 15024
13, 4	Postmaster		Clairton PA 15025
13, 4	Postmaster		Clinton PA 15026
13, 4	Postmaster		Coulters PA 15028
13, 4	Postmaster		Creighton PA 15030
13, 4	Postmaster		Cuddy PA 15031
13, 4	Postmaster		Curtisville PA 15032
13, 4	Postmaster		Dravosburg PA 15034
13, 4	Postmaster		East McKeesport PA 15035
13, 4	Postmaster		Elizabeth PA 15037
13, 4	Postmaster		Frank PA 15041
13, 4	Postmaster		Gibsonia PA 15044
13, 4	Postmaster		Glassport PA 15045
13, 4	Postmaster		Glenwillard PA 15046
13, 4	Postmaster		Greenock PA 15047
13, 4	Postmaster		Harwick PA 15049

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Indianola PA 15051
13, 4	Postmaster		Leetsdale PA 15056
13, 4	Postmaster		Natrona Heights PA 15065
13, 4	Postmaster		Oakdale PA 15071
13, 4	Postmaster		Rural Ridge PA 15075
13, 4	Postmaster		Russellton PA 15076
13, 4	Postmaster		Sturgeon PA 15082
13, 4	Postmaster		Tarentum PA 15084
13, 4	Postmaster		Warrendale PA 15086
13, 4	Postmaster		West Elizabeth PA 15088
13, 4	Postmaster		Wexford PA 15090
13, 4	Postmaster		Wildwood PA 15091
13, 4	Postmaster		Allison Park PA 15101
13, 4	Postmaster	Bellvue Station	Pittsburgh PA 15102
13, 4	Postmaster		Braddock PA 15104
13, 4	Postmaster		Carnegie PA 15106
13, 4	Postmaster		Copaopolis PA 15108
13, 4	Postmaster		Duquesne PA 15110
13, 4	Postmaster		East Pittsburgh PA 15112

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Glenshaw PA 15116
13, 4	Postmaster		Homestead PA 15120
13, 4	Postmaster		West Mifflin PA 15122
13, 4	Postmaster		Imperial PA 15126
13, 4	Postmaster		Ingomar PA 15127
13, 4	Postmaster		Library PA 15129
13, 4	Postmaster		McKeesport PA 15130
13, 4	Postmaster		McKees Rocks PA 15136
13, 4	Postmaster		Oakmont PA 15139
13, 4	Postmaster		Pitcairn PA 15140
13, 4	Postmaster		Pittock PA 15141
13, 4	Postmaster		Preston PA 15142
13, 4	Postmaster		Sewickley PA 15143
13, 4	Postmaster		Springdale PA 15144
13, 4	Postmaster		Turtle Creek PA 15145
13, 4	Postmaster		Verona PA 15147
13, 4	Postmaster		Wilmerding PA 15148
13, 4	Postmaster	Arsenal Station	Pittsburgh PA 15201
13, 4	Postmaster	Carson Station	Pittsburgh PA 15203

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster	Corlis Station	Pittsburgh PA 15204
13, 4	Postmaster	Crafton Station	Pittsburgh PA 15205
13, 4	Postmaster	East Liberty Station	Pittsburgh PA 15206
13, 4	Postmaster	Hazelwood Station	Pittsburgh PA 15207
13, 4	Postmaster	Homewood Station	Pittsburgh PA 15208
13, 4	Postmaster	Millvale Station	Pittsburgh PA 15209
13, 4	Postmaster	Mount Oliver Station	Pittsburgh PA 15210
13, 4	Postmaster	Mount Washington Station	Pittsburgh PA 15211
13, 4	Postmaster	North Side Station	Pittsburgh PA 15212
13, 4	Postmaster	Oakland Station	Pittsburgh PA 15213
13, 4	Postmaster	Observatory Station	Pittsburgh PA 15214
13, 4	Postmaster	Dormont Station	Pittsburgh PA 15216
13, 4	Postmaster	South Hills Station	Pittsburgh PA 15216
13, 4	Postmaster	Squirrel Hill Station	Pittsburgh PA 15217
13, 4	Postmaster	Edgewood Station	Pittsburgh PA 15218
13, 4	Postmaster		Pittsburgh PA 15219
13, 4	Postmaster	Wabash Station	Pittsburgh PA 15220
13, 4	Postmaster	Wilkinsburg Station	Pittsburgh PA 15221
13, 4	Postmaster		Pittsburgh PA 15222

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster	Etna Station	Pittsburgh PA 15223
13, 4	Postmaster	Bloomfield Station	Pittsburgh PA 15224
13, 4	Postmaster	Neville Island	Pittsburgh PA 15225
13, 4	Postmaster	Brookline Station	Pittsburgh PA 15226
13, 4	Postmaster	Brentwood Station	Pittsburgh PA 15227
13, 4	Postmaster	Mount Lebanon Station	Pittsburgh PA 15228
13, 4	Postmaster	West View Station	Pittsburgh PA 15229
13, 4	Postmaster		Pittsburgh PA 15230
13, 4	Postmaster	Shadyside Station	Pittsburgh PA 15232
13, 4	Postmaster	Kilbuck Station	Pittsburgh PA 15233
13, 4	Postmaster	Castle Shannon Station	Pittsburgh PA 15234
13, 4	Postmaster	Penn Hills	Pittsburgh PA 15235
13, 4	Postmaster	Pleasant Hills Station	Pittsburgh PA 15236
13, 4	Postmaster	McKnight Station	Pittsburgh PA 15237
13, 4	Postmaster	Blawnox Station	Pittsburgh PA 15238
13, 4	Postmaster	Plum Station	Pittsburgh PA 15239
13, 4	Postmaster		Belle Vernon PA 15012
13, 4	Postmaster		Uniontown PA 15401
13, 4	Postmaster		Adah PA 15410

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Allison PA 15413
13, 4	Postmaster		Brier Hill PA 15415
13, 4	Postmaster		Brownfield PA 15416
13, 4	Postmaster		Brownsville PA 15417
13, 4	Postmaster		Cardale PA 15420
13, 4	Postmaster		Chalkhill PA 15421
13, 4	Postmaster		Chestnut Ridge PA 15422
13, 4	Postmaster		Connellsville PA 15425
13, 4	Postmaster		Dawson PA 15428
13, 4	Postmaster		Dickerson Run PA 15430
13, 4	Postmaster		Dunbar PA 15431
13, 4	Postmaster		East Millsboro PA 15433
13, 4	Postmaster		Fairbank PA 15435
13, 4	Postmaster		Fairchance PA 15436
13, 4	Postmaster		Farmington PA 15437
13, 4	Postmaster		Fayette City PA 15438
13, 4	Postmaster		Gibbon Glade PA 15440
13, 4	Postmaster		Grindstone PA 15442
13, 4	Postmaster		Hibbs PA 15443

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Hiller PA 15444
13, 4	Postmaster		Hopwood PA 15445
13, 4	Postmaster		Indian Head PA 15446
13, 4	Postmaster		Isabella PA 15447
13, 4	Postmaster		Keisterville PA 15449
13, 4	Postmaster		La Belle PA 15450
13, 4	Postmaster		Lamberton PA 15452
13, 4	Postmaster		Leckrone PA 15454
13, 4	Postmaster		Leisenring PA 15455
13, 4	Postmaster		Lemont Furnace PA 15456
13, 4	Postmaster		McClellandtown PA 15458
13, 4	Postmaster		Markleysburg PA 15459
13, 4	Postmaster		Martin PA 15460
13, 4	Postmaster		Masontown PA 15461
13, 4	Postmaster		Melcroft PA 15462
13, 4	Postmaster		Merrittstown PA 15463
13, 4	Postmaster		Mill Run PA 15464
13, 4	Postmaster		Mount Braddock PA 15465
13, 4	Postmaster		Newell PA 15466

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		New Geneva PA 15467
13, 4	Postmaster		New Salem PA 15468
13, 4	Postmaster		Nornallville PA 15469
13, 4	Postmaster		Ohiopyle PA 15470
13, 4	Postmaster		Perryopolis PA 15472
13, 4	Postmaster		Oliver PA 15472
13, 4	Postmaster		Point Marion PA 15474
13, 4	Postmaster		Republic PA 15475
13, 4	Postmaster		Ronco PA 15476
13, 4	Postmaster		Smithfield PA 15478
13, 4	Postmaster		Smock PA 15480
13, 4	Postmaster		Star Junction PA 15482
13, 4	Postmaster		Uledi PA 15484
13, 4	Postmaster		Vanderbilt PA 15486
13, 4	Postmaster		Waltersburg PA 15488
13, 4	Postmaster		West Leisenring PA 15489
13, 4	Postmaster		White PA 15490
13, 4	Postmaster		Whitsett PA 15491
13, 4	Postmaster		Everson PA 15631

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Sycamore PA 15264
13, 4	Postmaster		Bobtown PA 15315
13, 4	Postmaster		Brave PA 15316
13, 4	Postmaster		Carmichaels PA 15320
13, 4	Postmaster		Clarksville PA 15322
13, 4	Postmaster		Crucible PA 15325
13, 4	Postmaster		Dilliner PA 15327
13, 4	Postmaster		Garards Fort PA 15334
13, 4	Postmaster		Garrison PA 15335
13, 4	Postmaster		Graysville PA 15337
13, 4	Postmaster		Greensboro PA 15338
13, 4	Postmaster		Holbrook PA 15341
13, 4	Postmaster		Jefferson PA 15344
13, 4	Postmaster		Mather PA 15346
13, 4	Postmaster		Mt Morris PA 15349
13, 4	Postmaster		Nemacolin PA 15351
13, 4	Postmaster		New Freeport PA 15352
13, 4	Postmaster		Nineveh PA 15353
13, 4	Postmaster		Pine Bank PA 15354

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Rices Landing PA 15357
13, 4	Postmaster		Rogersville PA 15359
13, 4	Postmaster		Spraggs PA 15362
13, 4	Postmaster		Waynesburg PA 15370
13, 4	Postmaster		Wind Ridge PA 15380
13, 4	Postmaster		Atlasburg PA 15004
13, 4	Postmaster		Bulger PA 15019
13, 4	Postmaster		Burgettstown PA 15021
13, 4	Postmaster		Charleroi PA 15022
13, 4	Postmaster		Courtney PA 15029
13, 4	Postmaster		Donora PA 15033
13, 4	Postmaster		Eldersville PA 15036
13, 4	Postmaster		Elrama PA 15038
13, 4	Postmaster		Joffre PA 15053
13, 4	Postmaster		Langeloth PA 15054
13, 4	Postmaster		Lawrence PA 15055
13, 4	Postmaster		McDonald PA 15057
13, 4	Postmaster		Midway PA 15060
13, 4	Postmaster		Monongahela PA 15063

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		New Eagle PA 15067
13, 4	Postmaster		Slovan PA 15078
13, 4	Postmaster		Bealsville PA 15213
13, 4	Postmaster		Washington PA 15301
13, 4	Postmaster		Amity PA 15311
13, 4	Postmaster		Avella PA 15312
13, 4	Postmaster		Bentleyville PA 15314
13, 4	Postmaster		Canonsburg PA 15317
13, 4	Postmaster		Cecil PA 15321
13, 4	Postmaster		Claysville PA 15323
13, 4	Postmaster		Cokeburg PA 15324
13, 4	Postmaster		Dunns Station PA 15329
13, 4	Postmaster		Eighty Four PA 15330
13, 4	Postmaster		Ellsworth PA 15331
13, 4	Postmaster		Finleyville PA 15332
13, 4	Postmaster		Fredricktown PA 15333
13, 4	Postmaster		Gastonville PA 15336
13, 4	Postmaster		Hendersonville PA 15339
13, 4	Postmaster		Hickory PA 15340

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Houston PA 15342
13, 4	Postmaster		Meadow Lands PA 15342
13, 4	Postmaster		Marianna PA 15345
13, 4	Postmaster		Millsboro PA 15348
13, 4	Postmaster		Muse PA 15350
13, 4	Postmaster		Rea PA 15356
13, 4	Postmaster		Scenery Hill PA 15360
13, 4	Postmaster		South View PA 15361
13, 4	Postmaster		Strabane PA 15363
13, 4	Postmaster		Taylorstown PA 15365
13, 4	Postmaster		Van Voorhis PA 15366
13, 4	Postmaster		Venetia PA 15367
13, 4	Postmaster		Vestaburg PA 15368
13, 4	Postmaster		West Alexander PA 15376
13, 4	Postmaster		West Finley PA 15377
13, 4	Postmaster		Westland PA 15378
13, 4	Postmaster		West Middletown PA 15379
13, 4	Postmaster		Allenport PA 15412
13, 4	Postmaster		Coal Center PA 15423

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Daisytown PA 15427
13, 4	Postmaster		Dembo PA 15429
13, 4	Postmaster		Dunlevy PA 15432
13, 4	Postmaster		Richeyville PA 15432
13, 4	Postmaster		Elco PA 15434
13, 4	Postmaster		Roscoe PA 15477
13, 4	Postmaster		Stockdale PA 15483
13, 4	Postmaster		Braeburn PA 15016
13, 4	Postmaster		Monessen PA 15062
13, 4	Postmaster		New Kensington PA 15068
13, 4	Postmaster		Pricedale PA 15072
13, 4	Postmaster		Sutersville PA 15083
13, 4	Postmaster		Trafford PA 15085
13, 4	Postmaster		Webster PA 15087
13, 4	Postmaster		West Newton PA 15089
13, 4	Postmaster		Jacobs Creek PA 15448
13, 4	Postmaster		Smithton PA 15479
13, 4	Postmaster		Van Meter PA 15487
13, 4	Postmaster		Greensburg PA 15601

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Armburst PA 15610
13, 4	Postmaster		Acme PA 15610
13, 4	Postmaster		Adamsburg PA 15611
13, 4	Postmaster		Ardara PA 15615
13, 4	Postmaster		Arona PA 15617
13, 4	Postmaster		Avonmore PA 15618
13, 4	Postmaster		Bovard PA 15619
13, 4	Postmaster		Bradenville PA 15620
13, 4	Postmaster		Calumet PA 15621
13, 4	Postmaster		Champion PA 15622
13, 4	Postmaster		Claridge PA 15623
13, 4	Postmaster		Crabtree PA 15624
13, 4	Postmaster		Darragh PA 15625
13, 4	Postmaster		Delmont PA 15626
13, 4	Postmaster		Derry PA 15627
13, 4	Postmaster		Donegal PA 15628
13, 4	Postmaster		E Vandergrift PA 15629
13, 4	Postmaster		Export PA 15632
13, 4	Postmaster		Grapeville PA 15634

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Hannastown PA 15635
13, 4	Postmaster		Harrison PA 15636
13, 4	Postmaster		Herminie PA 15637
13, 4	Postmaster		Forber Road PA 15637
13, 4	Postmaster		Hostetter PA 15638
13, 4	Psotmaster		Hunker PA 15639
13, 4	Postmaster		Hutchinson PA 15640
13, 4	Postmaster		Hyde Park PA 15641
13, 4	Postmaster		Irwin PA 15642
13, 4	Postmaster		Jeannette PA 15644
13, 4	Psotmaster		Jones Mills PA 15646
13, 4	Postmaster		Larimer PA 15647
13, 4	Postmaster		Latrobe PA 15650
13, 4	Postmaster		Laughlintown PA 15655
13, 4	Postmaster		Ligonier PA 15658
13, 4	Postmaster		Lowber PA 15660
13, 4	Postmaster		Loyalhanna PA 15661
13, 4	Postmaster		Luxor PA 15662
13, 4	Postmaster		Madison PA 15663

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Mammoth PA 15665
13, 4	Postmaster		Manor PA 15665
13, 4	Postmaster		Mt Pleasant PA 15666
13, 4	Postmaster		Murrysville PA 15668
13, 4	Postmaster		New Alexandria PA 15670
13, 4	Postmaster		New Derry PA 15671
13, 4	Postmaster		New Stanton PA 15672
13, 4	Postmaster		Norvelt PA 15674
13, 4	Postmaster		Penn PA 15675
13, 4	Postmaster		Pleasant Unity PA 15676
13, 4	Postmaster		Rector PA 15677
13, 4	Postmaster		Rillton PA 15678
13, 4	Postmaster		Ruffs Dale PA 15679
13, 4	Postmaster		Salina PA 15680
13, 4	Postmaster		Scottdale PA 15683
13, 4	Postmaster		Slickville PA 15684
13, 4	Postmaster		Southwest PA 15685
13, 4	Postmaster		Shahlstown PA 15687
13, 4	Postmaster		United PA 15690

LABEL	NAME	ADDRESS	CITY
13, 4	Postmaster		Wendel PA 15691
13, 4	Postmaster		Westmoreland Ci PA 15692
13, 4	Postmaster		Whitney PA 15693
13, 4	PostmasteR		Wyand PA 15695
13, 4	Postmaster		Youngstown PA 15696
13, 4	Postmaster		Youngwood PA 15697
13, 4	Postmaster		Yukon PA 15698
13, 4	Postmaster		Alverton PA 15710
13, 4	Postmaster		Torrance PA 15779
13, 4	Postmaster		Bolivar PA 15923
13, 4	Postmaster		New Florence PA 15944
13, 4	Postmaster		Seward PA 15954
13, 5	Postmaster		Morgantown WV 26505
13, 5	Postmaster		Blacksville WV 26521
13, 5	Postmaster		Booth WV 26522
13, 5	Postmaster		Core WV 26529
13, 5	Postmaster		Dellslow WV 26531
13, 5	Postmaster		Everettville WV 26533
13, 5	Postmaster		Jere WV 26536

LABEL	NAME	ADDRESS	CITY
13, 5	Postmaster		Maidsville WV 26541
13, 5	Postmaster		Osage WV 26543
13, 5	Postmaster		Pentress WV 26544
13, 5	Postmaster		Pursglove WV 26546
13, 5	Postmaster		Granville WV 26574
13, 5	Postmaster		Wadestown WV 26589
13, 5	Postmaster		Wana WV 26590
14, 4	President	Bologna Coal Company PO Box 127	Burgettstown PA 15021
14, 9	Goodhue Marine Attn: Joe Goodhue	190 Central Street	Leominster MA 1493
14, 9	Folsom Marine Service Corp Attn: W. Douglas Renfrue	PO Box 707	Ashland NH 3217
14, 9	Galva Foam Marine Industries Attn: Micahael Shank	Rt. 67, Box 19	Ashland MD 3217
14, 9	Hubbell, Inc. Attn: David Bragg	PO Box 3999	Bridgeport CT 6605
14, 9	Dock Hardware & Marine Attn: Matthew H. Stevenson	PO Box 257	Waterbury CT 6720
14, 9	Margus Company, Inc. Attn: Bill Wall	PO Box 6126	Bridgewater NY 8807
14, 9	Sullivan Flotation Systems	PO Box 639 Kings Highway	Warwick NY 10990
14, 9	Newspaper Clipping Service Attn: Vincent Morasce	3 Cedar Street	Batavia NY 14020
14, 9	Mon River Towning, Inc. Attn: James L Guttman	Speers Road	Belle Vernon PA 15012
14, 9	Mr. James Guttman President	Mon River Towning, Inc. Speers Road	Belle Vernon PA 15012
14, 9	Molnar's Marina Attn: Sue Molnar	185 Elk Horn	Bunola PA 15020

LABEL	NAME	ADDRESS	CITY
14, 9	Mr. Bill Lekse President	Campbell Transportation Co. PO Box 124	Charleroi PA 15022
14, 9	Mr. Richard Ehringer Manager, Customer Service	Ingram Barge Company 200 Washington Avenue	Dravosburg PA 15034
14, 9	Mr. David Kreutzer General Manager, River Div.	Consolidation Coal Company PO Box 387	Elizabeth PA 15037
14, 9	Monongahela Valley Review	PO Box 610	Monongahela PA 15063
14, 9	Davison Sand & Gravel Company Attn: Steve Jacobs	3rd Ave & 4th St	New Kensington PA 15068
14, 9	Mr. Max Janairo Chief Executive Officer	BIRO Tech, Inc. 1005 Beaver Grade Road	Coraopolis PA 15108
14, 9	R. J. Brown Towing Company Attn: R. J. Brown	PO Box 306	Coraopolis PA 15108
14, 9	M & O Marine, Inc.	Ohio River at Ohio Street	McKees Rocks PA 15136
14, 9	Ken Barrick Company	PO Box 415	Monroeville PA 15146
14, 9	Gemco Sales Attn: James Ponze	3150 Smallman Street	Pittsburgh PA 15201
14, 9	Carnegie Museum	5800 Baum Blvd	Pittsburgh PA 15206
14, 9	River Salvage Company, Inc. Attn: Alvin J. Stein	1231 River Avenue	Pittsburgh PA 15212
14, 9	Dock of the Bay	PO Box 7812	Pittsburgh PA 15216
14, 9	Mr. Rick King John I. Boyd Company	400 Oliver Building Mellon Square	Pittsburgh PA 15222
14, 9	Ohio River Company Attn: David Gladwell	Suite 700 650 Smithfield St	Pittsburgh PA 15222
14, 9	Mr. William M. Kudaroski Operations Manger - Production	Pennsylvania American Water Co 410 Cooke Lane	Pittsburgh PA 15234
14, 9	Christine Davis Consultants Attn: Christine Davis	U-PARC 790 Wm Pitt Way	Pittsburgh PA 15238
14, 9	Diversified Marine, Inc. Attn: John R. Romick	PO Box 111261	Pittsburgh PA 15238
14, 9	Burrell Industries, Inc. Attn: Gene Kiral	161 Johnson Road	Houston PA 15342

LABEL	NAME	ADDRESS	CITY
14, 9	Monongahela Railway Company Attn: Don Painter	53 Market Street	Brownsville PA 15417
14, 9	Maund Industries Attn: J. Maund	866 Wood Street	California PA 15419
14, 9	Mr. D. E. Cole	West Penn Power Company 800 Cabin Hill Drive	Greensburg PA 15601
14, 9	Pitmarine Company Attn: G. H. Crain	1164 Freedom Road	Mars PA 16046
14, 9	Crain Brothers, Inc. Attn: Joseph T. Hoepp	PO Box 538	Beaver PA 16115
14, 9	Glacial Sand & Gravel Company Attn: Mark Snyder	PO Box 1022	Kittanning PA 16201
14, 9	Buckeye Pipeline Company Attn: Don Hankey	PO Box 368	Emmaus PA 18049
14, 9	Porter-Wright-Morris & Arthur Attn: Robert E. Steinberg	1233 20th Street, NW	Washington DC 20036
14, 9	Rupert Landscape Company	17701 New Hampshire Avenue	Ashton MD 20861
14, 9	Mr. Les Sutton President	Ingram Barge Company PO Box 23049	Nashville KY 24110
14, 9	Dock & Marine Construction Co	PO Box 31602	Charleston SC 29417
14, 9	Nicolon Corp. Attn: Don Dominske	Suite 500 3500 Parkway Lane	Norcross GA 30092
14, 9	R. O. Contracting Company Attn: Frank Schulte	Clark & Main (PO Box 26)	Mayo FL 32066
14, 9	Stroud Diving & Hydrography Attn: Charles Potter	2045 Gilmore Street	Jacksonville IL 32204
14, 9	Mr. Omer Coleman, Manager Maysville Division	Crounse Corporation 102 West Second Street	Maysville KY 41056
14, 9	Mr. Zane Meek Admin Mgr - Marine Transport	Ashland Oil Company PO Box 391	Ashland KY 41101
14, 9	The Ranney Division Hydrogroup, Inc.	Attn: Jim French 2 N State St. PO Box 729	Westerville OH 43081
14, 9	St Joe Marine	Box 215	Bellaire OH 43906
14, 9	Shoreside Network Marketing Attn: Patrick J. Reali	29275 Clenens Road	Westlake OH 44145

LABEL	NAME	ADDRESS	CITY
14, 9	Syro Steel Company Attn: Robin Cera	1170 North State Street	Girard OH 44420
14, 9	MB Operating Co., Inc. Attn: Larry Aldridge	104 Sixth Street, SW	Canton OH 44702
14, 9	Cook Screen Technology Attn: Lee Cook	1292 Glendale-Melford Road	Cincinnati OH 45215
14, 9	Tri State Focus Attn: Donna Covert	PO Box 16168	Cincinnati OH 45217
14, 9	Dravo Basic Materials Co., Inc Attn: James Pennington	5253 Wooster Road	Cincinnati OH 45226
14, 9	Frisbie Engine & Machine Co. Attn: Reed L. Coen	PO Box 14568	Cincinnati OH 45250
14, 9	Mr. Norbert Whitlock	American Commercial Barge Line PO Box 610	Jeffersonville IN 47130
14, 9	Millgard Corporation Attn: Paul A. Kaminski	12822 Stark Road PO Box 2248	Livonia PA 48151
14, 9	Sea Search, Inc.	2445 East Hile Road	Muskegon MI 49444
14, 9	Cherrington Corporation Attn: Boyd Faires	Suite 300E 4801 Woodway Drive	Madison WI 53718
14, 9	Allan Dock Mfg. Attn: Fred Pesch	1917 Lake Street	Algoma WI 54201
14, 9	Shoremaster, Inc.	1 Shoremaster Drive Industrial Park	Fergus Falls MN 56538
14, 9	Grant Contracting Company Attn: Bruce Armstrong	General Manager PO Box 42	Virginia IL 62691
14, 9	Meeco Marinas, Inc. Attn: Andrew K. Mearns	PO Box 518	McAlester OK 74502
15, 4	Supervisory Plant Engineer	Columbia Gas of PA, Inc. 1405 McFarland Road	Pittsburgh PA 15216
15, 4	Superintendent Engr Dist	Equitable Gas Company 420 Blvd of the Allies	Pittsburgh PA 15219
15, 4	Manager	Bell Telephone 201 Stanwix Street	Pittsburgh PA 15222
15, 4	Manager - Engineering Services	Peoples Natural Gas Company Two Gateway Center	Pittsburgh PA 15222
15, 4	Chief Engineer	Alcosan 3300 Preble Avenue	Pittsburgh PA 15233

LABEL	NAME	ADDRESS	CITY
15, 4	Frank R. Meinert	Duquesne Light Company One Oxford Center 301 Grant St	Pittsburgh PA 15279
15, 4	Senior Civil Engineer	Columbia Gas Transmission Corp PO Box 498	Washington PA 15301
15, 4	Mining Engineer	Coal Department Duquesne Light Company	Greensboro PA 15338
15, 4	Director - General Planning	Allegheny Power Service Corp Cabin Hill	Greensburg PA 15601
15, 9	Mr. Jack Carey Executive Vice President, Oper	Duquesne Light Company 301 Grant Street	Pittsburgh PA 15279
17, 4	Secretary	Braddock Chamber of Commerce	Braddock PA 15104
17, 4	Secretary Chartiers Valley	Chamber of Commerce 14 East Main Street	Carnegie PA 15106
17, 4	Executive Secretary Steel Valley Chamber of	Commerce 305 East 8th Avenue	Homestead PA 15120
17, 4	Secretary McKees Rocks Chamber of	Commerce Bell and Linden Streets	McKees Rocks PA 15136
17, 4	Executive Director Monroeville Chamber Commerce	William Penn Plaza, Suite 295 2790 Mosside Blvd	Monroeville PA 15146
17, 4	Manager - Civic Affairs Greater Pittsburgh Chamber	of Commerce 411 Seventh Avenue	Pittsburgh PA 15219
17, 4	Executive Director Wilkingburg Chamber of	Commerce 727 Penn Avenue	Pittsburgh PA 15221
17, 4	Executive Director	Allegheny Chamber of Commerce 812 Western Avenue	Pittsburgh PA 15233
18, 9	Waterways Association of Pgh Attn: Arthur Parker	PO Box 81	McKeesport PA 15134
18, 9	Mr. R. Barry Palmer Executive Director	DINAMO Three Gateway Center	Pittsburgh PA 15222
19, 4	Librarian	Bridgeville Public Library 441 Station Street	Bridgeville PA 15017
19, 4	Librarian	Clairton Public Library 616 Miller Avenue	Clairton PA 15025
19, 4	Librarian	DR J C Kelly Memorial Library Greenock-Buena Vista Road	Greenock PA 15047
19, 4	Tarentum Community Library	Allegheny Valley 315 East 6th Avenue	Tarentum PA 15084

LABEL	NAME	ADDRESS	CITY
19, 4	Librarian	Bethel Park Public Library 5100 West Library Avenue	Bethel Park PA 15102
19, 4	Librarian	Andrew Carnegie Free Library Beechwood Avenue	Carnegie PA 15106
19, 4	Librarian	Coraopolis Memorial Library State Avenue & School Street	Coraopolis PA 15108
19, 4	Library	Robert Morris College Narrows Run Road	Coraopolis PA 15108
19, 4	Librarian	Glenshaw Public Library Butler Plank Road	Glenshaw PA 15116
19, 4	Librarian	North Hills Library 1822 Mount Royal Boulevard	Glenshaw PA 15116
19, 4	Librarian Allegheny County Community	College, South Campus 1750 Clairton Road, Route 885	West Mifflin PA 15122
19, 4	Librarian	South Park Library 2575 Brownsville Road	Library PA 15129
19, 4	Librarian	Carnegie Free Library 1507 Library Avenue	McKeesport PA 15132
19, 4	Librarian	North Versailles Public Library, Eastland Mall	N Versailles PA 15137
19, 4	Librarian	Springdale Free Library 331 School Street	Springdale PA 15144
19, 4	Librarian	Andrew Bayne Memorial Library 34 North Ralph Avenue	Pittsburgh PA 15202
19, 4	Librarian	Avalon Public Library 640 California Avenue	Pittsburgh PA 15202
19, 4	Librarian	Crafton Public Library 70 East Crafton Avenue	Pittsburgh PA 15205
19, 4	Librarian Allegheny Regional Branch	Carnegie Library of Pittsburgh Allegheny Square	Pittsburgh PA 15212
19, 4	Librarian	C C Mellor Memorial Library 1 Pennwood Avenue	Pittsburgh PA 15213
19, 4	Librarian Government Documents Office	Carnegie Library of Pittsburgh 4400 Forbes Avenue	Pittsburgh PA 15213
19, 4	Librarian	Dormont Public Library 2950 West Liberty Avenue	Pittsburgh PA 15216
19, 4	Librarian	Carnegie Free Library 1800 MOnongahela Avenue	Pittsburgh PA 15218

LABEL	NAME	ADDRESS	CITY
19, 4	Librarian	Duquesne University Library Locust & Colbert Streets	Pittsburgh PA 15219
19, 4	Librarian	Greentree Public Library 978 Greentree Road	Pittsburgh PA 15220
19, 4	Librarian	Point Park College Library Wood St & Blvd of the Allies	Pittsburgh PA 15222
19, 4	Librarian	Brentwood Library 3624 Brownsville Road	Pittsburgh PA 15227
19, 4	Librarian	Mt Lebanon Public Library 16 Castle Shannon Boulevard	Mt Lebanon PA 15228
19, 4	Librarian Transit Research Library	Port Authority of Ally Co. Beaver & Island Avenues	Pittsburgh PA 15233
19, 4	Librarian	Baldwin Township Library 10 Community Park Drive	Pittsburgh PA 15234
19, 4	Librarian	Penn Hills Library 240 Aster Street	Pittsburgh PA 15235
19, 4	Librarian	Whitehall Publicl Library 100 Borough Park Drive	Pittsburgh PA 15236
19, 4	Librarian	Northland Public Library 300 Cumberland Road	Pittsburgh PA 15237
19, 4	Staff Reporter	North Hills News Record 9825 Perry Highway	Pittsburgh PA 15237
19, 4	Librarian	Upper St Clair Twp Library 1820 McLaughlin Run Road	Pittsburgh PA 15241
19, 4	Librarian Documents Office	Hillman Library University of Pittsburgh	Pittsburgh PA 15260
19, 4	Director	Ciocco Library University of Pittsburgh	Pittsburgh PA 15261
19, 4	Librarian Bevier Engineering Library	126 Benedum Hall University of Pittsburgh	Pittsburgh PA 15261
19, 4	Librarian	Wilkinsburgh Public Library 605 Ross Avenue	Pittsburgh PA 15521
19, 4	Librarian	Uniontown Public Library Jefferson Street	Uniontown PA 15401
19, 4	WMBS Radio	PO Box 688	Uniontown PA 15401
19, 4	Librarian	Brownsville Public Library Snowden Square	Brownsville PA 15417

LABEL	NAME	ADDRESS	CITY
19, 4	City Editor	The Telegraph 16-18 Bridge Street	Brownsville PA 15417
19, 4	WASP Radio	PO Box 270	Brownsville PA 15417
19, 4	Librarian	Connellsville Library South Pittsburgh Street	Connellsville PA 15425
19, 4	Librarian	German-Masontown Library 9 South Washington Street	Masontown PA 15461
19, 4	Managing Editor	The Masontown Sentinel PO Box 751	Masontown PA 15461
19, 4	News Editor	Point Marion News Box 158	Point Marion PA 15474
19, 4	Librarian	Frenniken Memorial Library 102 East George Street	Carmichaels PA 15320
19, 4	Librarian	Bowby Public Library 311 North West Street	Waynesburg PA 15370
19, 4	Editor	Waynesburg Republican 63 South Washington Street	WAYNESBURG PA 15370
19, 4	News Editor	Democrat-Messenger 32 Church Street	Waynesburg PA 15370
19, 4	Program Manager	WANB Radio PO Box 150	Waynesburg PA 15370
19, 4	Librarian	Burgettstown Library 2 Kerr Street	Burgettstown PA 15021
19, 4	Librarian	Charleroi Public Library 401 Sixth Street	Charleroi PA 15022
19, 4	Librarian	Donora Public Library 676 McKean Avenue	Donora PA 15033
19, 4	Librarian	McDonald Free Library North Street	McDonald PA 15057
19, 4	Librarian	Byers Memorial Library 900 West Main Street	Monongahela PA 15063
19, 4	Librarian	Rochester Public Library 252 Adams Street	Rochester PA 15074
19, 4	Librarian	Citizens Library 55 South College Square	Washington PA 15301
19, 4	Librarian	Peters Township Library 610 East McMurray	McMurray PA 15317

LABEL	NAME	ADDRESS	CITY
19, 4	Librarian	Marianna Community Library Main Street	Marianna PA 15345
19, 4	Director of Library Services	Louis Manderino Library California University of PA	California PA 15419
19, 9	Librarian	Monongahela Area Library 813 West Main Street	Monongahela PA 15063
19, 9	News Director Attn: Walt E. Frank	PO Box 464	Hollidaysburg PA 16648
19, 9	Waterways Journal Attn: Editor	666 Security Building 319 North 4th Street	St Louis Mo 63102
20, 5	West Virginia University Attn: Wallace Venable, PE	Mechanical & Aero Engineering	Morgantown WV 26505
21, 9	Ms. Ruth Miller	Donora Historical Society 7th & McKean Avenue	Donora PA 15022
21, 9	Mr. George Hutchko Monongahela River Buff's	Association RD 2	Monongahela PA 15063
21, 9	Ms. Sally Kearnan Monongahela Area Historical	Society Diane Drive	Monongahela PA 15063
21, 9	Mr. John Herbst Historical Society of Western	Pennsylvania 4388 Bigelow Blvd	Pittsburgh PA 15213
21, 9	Ms. Kathy Goodwin Washington County Historical	and Landmarks Foundation 235 McClay Road	Washington PA 15219
21, 9	Pittsburgh History and Landmarks Foundation	450 The Landmarks Building Station Square	Pittsburgh PA 15219
21, 9	Ms. Teresa L. Cypher Monongahela Area Chamber of	Commerce 173 West Main Street	Monongahela PA 15063
21, 9	Western Pennsylvania	Conservancy 314 4th Avenue	Pittsburgh PA 15222
21, 9	Mr. Keith Bingham, Manager Transportation & Distribution	Dravo Line One Gateway Center	Pittsburgh PA 15222
21, 9	Mr. Fred Rimmel Executive Director	Audubon Society of Western PA 614 Dorseyville Road	Pittsburgh PA 15238
21, 9	Mr. Roy Sarver Washington County Historical	Society 49 East Maiden Street	Washington PA 15301
21, 9	Mr. Keith Dunbar Director	America's Industrial Heritage PO Box 565	Hollidaysburg PA 16648
21, 9	Pennsylvania Intergovernmental	Council PO Box 11880	Harrisburg PA 17108

LABEL	NAME	ADDRESS	CITY
21, 9	Executive Director ATTN: Bob Duis, Trans Offcr	Appalachian Regional Comm 1666 Connecticut Avenue, NW	Washington DC 20235
21, 9	NPPC	1360 S. Clarkson Street	Denver CO 80210
0,	Mr. William M. Kudarski PA American Water Company	410 Cooke Lane	Pittsburgh PA 15234
0,	Mr. J. D. Cossel Chief, Design & Construction	Conrail 15 North 32nd St - 12th Floor	Philadelphia PA 19104
0,	Mr. Max Solomon Conrail	Conrail Building Holiday Drive	Pittsburgh PA 15220
0,	Mr. John Carey, Exec VP - Oper Duquense Light Company	One Oxford Center, 30-6 301 Grant Street	Pittsburgh PA 15279
0,	Mr. Michael Fisher Houston Harbaugh	2 Chatham Center Twelfth Floor	Pittsburgh PA 15219
0,	Mr. Pete Skrgic Vice President	Allegheny Power System, Inc. 320 Park Avenue	New York NY 10022
0,	Mr. W. R. Stewart	116 Lenoak Drive	Louisville KY 40124
0,	Ductmate Industries, Inc,	RD 3, Box 113	Monongahela PA 15063
0,	The Pittsburgh Press Attn: Ralph Haurwitz,	Environmental Reporter 34 Blvd of Allies	Pittsburgh PA 15222
0,	The Pittsburgh Post Gazette Attn: John Craig, Jr.	Editor PO Box 957	Pittsburgh PA 15230
0,	Daily Herald Observor Attn: Park Burroughs, Editor	440 West Main Street	Monongahela PA 15063
0,	Washington Observor-Reporter Attn: Park Boroughs - Editor	122 South Main Street	Washington PA 15301
0,	McKeesport Daily News Attn: Donald Dualc - Editor	401-409 Walnut Street	McKeesport PA 15132
0,	Valley Independent Attn: J. F. Jaworski - Editor	Eastgate 19	Monessen PA 15062
0,	Greensburg Tribune Review Attn: George A. Beidler-Editor	Cabin Hill Drive	Greensburg PA 15601
0,	Uniontown Herald-Standard Attn: Gloria Czuchan - Editor	8-18 East Church St, Box 848	Uniontown PA 15401
0,	Suchko Gas and Oil Company ATTN: Paul Suchko	922 Plumer Road	West Newton PA 15089

LABEL	NAME	ADDRESS	CITY
0,	Pittsburgh and Lake Erie Railroad	ATTN: Mr. W. E. Snyder Storehouse A	McKees Rocks PA 15136
0,	Consolidation Coal Company ATTN: Mr. George Gleich		Upper St Clair PA 15241
0,	Ms. Toni Grygo	2400 Cronemeyer Avenue	McKeesport PA 15132
0,	Mr. W. H. Thomas	400 Euclid	Dravosburg PA 15034
0,	Mr. James W. Matz	2900 Valley Street	McKeesport PA 15133
0,	Ms. Beverly Homa	143 Wilber Avenue	Turtle Creek PA 15145
0,	Mr. Adam Damico c/o Beverly Homa	143 Wilber Avenue	Turtle Creek PA 15145
0,	Mrs. Jo DeBolt Mon Valley Initiative	303-305 East Eighth Avenue	Homestead PA 15120

ATTACHMENT 5

OFFICIAL TRANSCRIPT OF PUBLIC MEETING

LOWER MON RIVER

NAVIGATION SYSTEM STUDY

PUBLIC MEETING

October 22, 1991, 7:30 P.M.

Place Held:

Elizabeth Forward Junior High School

Reported By:

Laurel S. Smay/Court Reporter

JRL
ENTERPRISES, INC.
Court Reporting Services

Three Gateway Center, Suite 1870
Pittsburgh, Pennsylvania 15222

Phone 412-471-9315
Fax 412-471-9437

LOWER MON RIVER

NAVIGATION SYSTEM STUDY

PUBLIC MEETING

COLONEL ALVORD: Good evening and welcome to this town meeting. I am Colonel Alvord and I am here with the United States Corp of Engineers. The reason that we are here tonight is to talk about our proposal for replacing three of the oldest locks and dams in the United States. I understand that you folks are going to have concerns and that is the reason that we are here tonight. We want to tell you what we have done on this study so far, where we believe that we are today, where we think that we are going, to give you an opportunity to ask questions and in some case, ask for your help because this plan is not concrete. We made what I think are significant efforts to make sure that the people were notified about the public workshops and the public meetings. I will tell you right now, there are no secrets. There is nothing about the project that we are trying to hide. We want to accomplish a project that s going to be in the best economic interest of the Mon Valley, The Greater Pennsylvania region, and do it with the absolute minimum impact possible on people n the area.

The way that we are going to go through this thing is a very brief formal portion s as follows; first, I

would like to introduce some people from the district and some local folks involved in local government. I am then going to present a very short presentation using slides on what our concerns of Locks and Dams 2,3, and 4, Braddock, Elizabeth and Charleroi are and why they need to be replaced, where we have gone in this study process at this point. We will discuss some fine lines of as to where we are going to today until the project begins and when the project ends. After I complete that presentation we are going to open the floor for comments and questions. Everybody's comment or question will be recorded. We will take it seriously. We have a Court Reporter who will record everything that will take place here this evening. We want to know what you comments are, we want to know what your concerns are, we want to know what your comments are, we want to answer all of those questions in so far as we can this evening.

I want to take a minute to introduce some of the people from our staff who have been involved deeply in this study and involved in the operations of the Locks and Dams on this river for quite awhile.

(Whereupon, all members of the Staff of the Army Corp of Engineers were introduced.)

COLONEL ALVORD: Now, we would like to give you a little background information on the project and why we

are where we are today.

(Whereupon, the slide presentation will begin.)

COLONEL ALVORD: The first study, n other words, the first indication that the Corp of Engineers had that there were problems with the locks and dams at Braddock, Elizabeth and Charleroi, therefore generated what we call a recognition study the first study ever in looking at the ensuing 20 years there was an assessment done of all of the locks and dams in the United States. There are 208 of these in which 2 are here n the Pittsburgh District. There were 8 locks and dams in the United States identified as needing immediate replacement for the combination of two reasons. The first on is reliability, n other words, the structures were so old that the concrete and wood, there was not steel used in those days, had deteriorated to such a point that we had serious reliability concerns about the structures. The second concern was about the capacity of the lock chamber. In other words, the lock chambers were so small that they could no longer economically handle the size of the tows on the rivers. Out of those 8 locks and dams identified as requiring immediate replacing, eight of those were here in the Pittsburgh District. Lock and Dam 7 on the Mon River, Lock and Dam 8 or Point Marion on the Mon River, Locks and Dams 2,3, and 4 on the Mon River,

Braddock, Elizabeth and Charleroi and the first three locks and dams gong downstream from the point n Pittsburgh on the Ohio River, Emsworth, Dashfield and Montgomery. Many of you may know that construction was authorized on new locks and dams at Grace Landing which will replace Lock and Dam and Point Marion in 1986 and we have already gone through construction on those two facilities. There are already two locks and dams being built on the Mon River. The Upper Mon River is in pretty good shape. The capacity of the lock chamber is adequate. So, we move down to the Lower Mon River so we have a continuous and economical commercial navigation system on the Mon River. We will just focus on the Mon because that is where the efforts are focused. If you look at Fairmont, (indicating) you will see Opekiska Lock and Dam, Hildabrand Lock and Dam and Morgantown Lock and Dam. All of those facilities are relatively new and they have lock chambers that are 84 feet wide by 600 feet long. That is more than adequate for that reach of the river. We will move to what is called the middle Mon River. Maxwell Lock and Dam, Lock and Dam and Point Marion. I already explained to you that at Point Marion we are building a new lock chamber that will be 84 feet wide by 720 feet long that will replace a lock that is 56 feet wide by 360 feet long. Lock and Dam 7 is being

replaced by a new lock and dam that is being constructed at Grace Landing. That lock chamber will be 84 feet wide by 720 feet long and when that new lock and dam is in operation, we will remove Lock and Dam 7 which also has an extremely small lock chamber 56 feet by 360 feet. Lock and Dam 2,3, and 4, which we call the Lower Mon, which have both the reliability and structural concerns that I mentioned briefly a moment ago.

I have mentioned that we have two concerns with these structures. One of the concerns is that we have structural deterioration and two is the undersized lock chambers. In other words, the average configuration of tow which moves along the river cannot traverse those lock structures, particularly Locks and Dams 3 and 4 because of the size of the lock chamber. We will go a little more in detail about the reliability aspect, the structural deterioration of those facilities.

Locks and Dams 2 at Braddock. The locks at this facility were constructed n 1953. Our current proposal would not do anything to those lock structures in near term. However, the dam that you see there was constructed in 1906. The oldest in the district and among the oldest in the country. There are serious concerns with the reliability of this structure. Now, we cannot tell you, nor can anyone tell you that that dam

will fail on such or such a date. What we do know is that we have done extensive inspections, we have sent divers down to inspect it down below the water surface. The timber pilings on which that structure is constructed, many of them are missing, The timber priving upon which the apron, the front portion, the downstream portion of which that dam is constructed are washed away and there are strong flows under the dam which is a serious consideration on a dam.

Locks and Dams 3 at Elizabeth. Both the lock chambers and the dam were constructed in 1907. The second oldest structure. We have the same kind of reliability concerns on that dam at Elizabeth as we do at Braddock. The same kinds of problems have been noted in various investigations of that structure. Similarly, we have two lock chambers there both of which are 56 feet wide and has some serious structural concerns inside the lock chambers. Also, we cannot operate both of those lock chambers at the same time since one empties into the other. One was built or enlarged as an afterthought of a previous rehabilitation on that project. There are serious concerns both with capacity and with the reliability of the structures.

Locks and Dams 4 in Charleroi. The lock structure in this project were built in 1932. They are in fair

condition. The dam was built in the late 60's, it is a gated dam and our current plan we would do nothing to that dam, but we would replace the lock structures.

Now, we didn't just sit down and pick a plan. In fact, we couldn't do that if we wanted to. The laws, the policies and the regulations under which we operate when we conduct a study like this requires that a whole variety of things have to be done and we have to pick the largest number of alternatives possible even if they are not feasible. We assume that every alternative is possible at the outset. The alternatives that we began with from an engineering stand point and from other bodies at the beginning of this study, we looked at 40 different possible options to replace these structures or repair them. Looking at things like cost and the impact on the community and those kinds of things, we worked on major cuts on 40 options down to 23 options down to a final eight alternatives from which we thought we had a most economic plan and then backed up about a half step and identified three plans again that appeared to be fairly close and an extremely detailed analysis under those three plans. After that detailed analysis arrived at our proposed plan at this point in time and this what our proposed plan would be. At Locks and Dams two at Braddock, we would replace that current fixed crest express dam with

a gated dam. We would do nothing with the lock chamber until well after the turn of the century. We will remove Locks and Dams 3 at Elizabeth all together. At Locks and Dams 4 we would leave the gated dam that was there that was built in the late 60's, but replace those two small and inefficient inaccurate lock chambers with two 84 feet by 720 feet lock chambers. Now, the impact from this project, the first major one that will be seen, is the change in pool elevations when we take out the dam out because water is going to seek its own level, obviously, pool 3 is higher right now than pool 2. We take out the dam at 3 the water level behind 3 will go down and the water level behind 2 will go up until they are both at the same level. There will be some changes in the river elevation along the river between Braddock and Charleroi. This gives you a conception of what the project will look like if our proposed plan is the plan that is constructed. When it is completed, Locks and Dams 2 will remain as they are today and there would be a gated dam at Locks and Dams 2 in Braddock.

Locks and Dams 4 in Charleroi, now remember, I didn't say anything about Elizabeth because part of our post-plans will be to remove the locks and dams in Elizabeth. At Locks and Dams 4 at Charleroi where we leave that gated dam that is there right now and we would

have two 84 foot wide by 720 foot chambers and you may recall from one of the previous slides that you saw you saw a little straight wall along here (indicating) between the end of the gates and where the current lock chamber begins right there. That was built in the late 60's knowing that one day we would have to come in and replace those lock chambers so we left that pier there to give us space to put those new lock chambers in without having to cut into the shore.

Cost. Of all of the alternatives that we have examined, this plan in which we call the NEDP Plan, which stands for National Economical Development Plan. in other words, the least costly, this is what the project will cost. Direct Federal cost; 623 and a half million dollars. Included in that cost is the cost of relocating any public facility. In other words, if there are sewer outlets that belong to another municipality our proposal at our Washington headquarters has been that we would replace them at public, government cost.

Non Federal Cost. Our estimate of what it would cost, private dock owners, Terminal operators and so on along the river is 111.2 million. Obviously, a concern. The whole project cost is 735 million dollars. If we stretch that out over the term of the project, it would be 73.6 million dollars per year. The annual benefits to

the Mon Valley would be 304 and a half million dollars a year. That is the reduced cost for the tow companies who move coal and other products up and down the river and one might assume at offshoot benefits to the communities along the river because of the reduced cost, power generation and those kinds of things. So, a net benefit to the region would be 231 million dollars.

As I mentioned earlier, there are by no means no Nothing locked in concrete of these plans. There are still a lot of steps that have to be negotiated and one of them is this meeting here tonight. First, we have our feasibility report out for review for some time, we allow 45 days and on November 12 is the time period for which public comment ends. We have received an awful lot of public comment already in the forms of letters in our district office. After we receive all of the public comment, we then go back in and determine what changes can and should be or must be made in that feasibility report. We would then send into our headquarters in Cincinnati, the Ohio River Division Headquarters. After they review the report and approve it the division engineers issues a public notice and we start preconstruction engineering design, but the other key thing about the division engineer's public notice is that serves to notifies the Congress that we

have an approved feasibility report. That is generally the milestone that Congress requires before they will authorize construction on a project. Even if all of those milestones are met, that does not mean that this project is locked in concrete as of December 16, 1991. We are on an almost daily basis making some magnitude of change on all of the projects that we have going on now. If we find some way to do something cheaper or find a way to do something better, if we find a way that would have less impact on the population in the project area, we may change this as we go along with the project. We are doing that right now at Grace Landing Point Marion and a number of other projects that we have going on in the Pittsburgh District area.

Now, the schedule for when construction would start, end and so. From the time that we get the Division Engineers notice, as I showed you on the previous slide, December 16, 1991 is the anticipated date for the notice, we can begin doing preconstruction engineering and design. In other words, we would start a more detailed design of the dam that would be built at Braddock and the new lock chambers that would be built in Charleroi. Those plans, specifications and designs would be needed for how we would remove Lock and Dam 3 at Elizabeth. You can see that our current schedule would have us beginning

the first construction in September of 1996. This is not something that we are trying to cram down the publics throats. We are providing plenty of time to look at alternatives, better way, more cost efficient ways of doing things. This would raise the new pool behind the new dam 2 and lower the pool behind dam 3 to equalize those two dams, bring those two river levels to the changes that showed you on the previous slide in December of 2003. We would then rehabilitate those locks in Braddock in 2022. So, we are talking a significant period of time here, this is not a project that we are gong to dump on the public unsuspecting and complete it overnight before anyone has any opportunity to react.

That gives you a sketch of our plan and why we are looking at those locks and dams, why they need to be replaced and our process, our plan, at this point in time is what the technical plan would be. What would be replaced, and what would be eliminated and so on and the time frame between now and 2003. The rehabilitation of the locks at 2 would not be a major impact item on the river. The key thing would be what would happen between 1996 and 2003.

At this point we are going to open the floor for comment. Mr. Tom Scott will use the cards that you filled out to call you up to make your comment. Again

step to the microphone so the recorder can get your clear comments and those will be transcribe by the way of after the meeting is over and each of those comments and questions will be taken back and put into transcript form and we will use those to review our draft feasibility report.

MR. JAMES BUCCI: My name is James Bucci and I am the Municipal Coordinator for the Borough of West Elizabeth. We have recognized this project about a year and a half ago and about the impact that it would have on West Elizabeth. It started with a letter dated September of 1990 to the Corp of West Elizabeth's opposition to the removal of Lock 3, (inaudible)--the sewers and sanitation outlets in the Borough which result in the intensity of the Borough of West Elizabeth ceases to exsist. We have a lot of tax payers. I see in your study, the Corp Plan, it is evident that Plan 1 and Plan 4 would be to be left. Plan 1 would be the removal of Lock 3. The Plan 4 which was moving Lock 3. 3 for 3 Plan. The West Elizabeth, moving the Lock 8/10 of a mile up the river would have no affect to us at all, but it would affect the residents 8/10 of a mile up the river and have no affect on anyone else, it seems to be the simplest plan.

Upon reading your studies, it seems apparent to put into effect Plan 1 for the cost and benefit factors and

certainly to the businesses and the Corps advantage. However, we still have concerned with this in as much as reading the material and what was addressed in West Elizabeth was three out of four major problems and one of them is still unaddressed cost-wise and effect-wise bringing this to the attention of your people, Mr. Dixon, Mr. Wise and Mr. Scott. We certainly need this addressed, it is certainly important how it was left out we are not sure, but it certainly was.

Our major concern is that we have see Greene Borough and what has happened to it as far as the community and we don't want this happening to West Elizabeth and any other municipality along the Mon River. The funding to it if Plan 1 was to go into effect, the cost factor (inaudible) is a known fact. The major concern of Plan 1 only be the gating of Dam 2 which would cause the possibility of barges jamming the gate and breaking loose along the river. What we would like to know is two things. Under Plan 1, this seems to be the Plan that you are going to go with, is the type of structure gating on Lock 2(inaudible) in which case would certainly be in favor of all of us in the municipality to apparently look at and make recommendations. The second one is, people would certainly recognize this, in the late 70's early 80's the dam project on the Cheat River which would

control most of the flooding in this area, that, I believe, is inaccurate. We would certainly be in favor of having this service put back. Those two factors are what we would like you to take a look at and decide if the unfunding and the unaddressed storm sewer that would be going through the borough is the recommendation. The Youghiogheny River has 15 percent of the occumpants right now into it by Montgomery Lock and you can't get much better than that, but putting a lock in and saying that it is going to benefit is a little hard to understand that any construction would be better than what we have.

So, these two things, basically I feel the two questions and the type of construction of the lock.

COLONEL ALVORD: Okay, Jim. Let me try to give you a whole bunch of answers real quick. There not being specific, but understand what you are getting at. First, let me ask Less, are we familiar with the unaddressed concern in West Elizabeth that Jim is talking about?

LESS: Yes, that is the pipe line, we will pick it up in the next report.

COLONEL ALVORD: Are we talking public?

LESS: Yes.

COLONEL ALVORD: Okay, a couple of other things that Jim was talking about. What control construction of the

Cheat River Basin. Over the last 20 years the Pittsburgh District has done a variety of initial studies on the need for flood control dams n the Cheat River Basin. Most of you are probably not familiar with this lack of Bureaucratic process trying to get a project authorized and funded for construction in the federal system. It takes about 20 years to do that. We only have three flood control dams off the Mon River that we can use to control flooding. That is the Stonewall Jackson down in Western West Virginia, Tygrat Lake and the Youghiogheny River Lake. We have much better control of the Allegheny and the Ohio, we have very good control of the Mon and we know that and we would like to construct some kind of flood control dam. We have not been able to get authorization out of Washington to pursue those into a feasibility study. Now, that doesn't mean that they are dead. They are inactive inaccurate as Jim mentioned, we just haven't been able to get approval to take the next step. But, we haven't forgotten about them, we still believe that there's merit in that area and we are looking into the Cheat River Basin. I assume that we can't say anything beyond that because I certainly can't say what would be approved up the line in Washington and by Congress.

Now, Jim made a good point. He is concerned about

Elizabeth because that is the municipality that he represents. West Elizabeth. We are trying to take into account every concern that has been brought to our attention as we have gone through this study. We have to take into account the impact of the entire study area. When you do an economical analysis of the entire project area, Plan 1, that's what Jim is talking about, that is the plan that I just told you about. The final preplan which is this one, two for three, a three for three replacement would replace individually each of the locks and dams at Braddock, Elizabeth and Charleroi and then what we call a without project condition. In other words, what if we don't apply this at all and waited until the structural conditions got so serious that we had to do something. When you perform the economical analysis under those final preplans, the most economically feasible plan, In other words, the lowest cost plan is the plan that we have proposed. We have to take all of those things into account. I think that we covered the one that got missed and I know that an explanation of the overall project doesn't satisfy specific concerns of any individual municipalty, but we will honestly do everything that we can to take into account those concerns as we maintained it from the draft graphic feasibility report to the final feasibility report.

MS. FLORENCE SWANTECK: What I would like to know is why Lincoln Borough official family was not notified. We don't know anything about this, we haven't heard anything about this, we heard it from the residents. Can you answer that question for me?

COLONEL ALVORD: Lincoln Borough, distribution, Tom?

MR. TOM SCOTT: Distribution was issued to Lincoln Borough. Lincoln Borough's post office is Elizabeth, is that correct? That is not any excuse, but we did miss mailing to Lincoln Borough and we sent one out after we were contacted by Lincoln Borough.

COLONEL ALVORD: Again, I agree, that is not an excuse. Let me explain how we handle public notices. Over the years we have developed a mailing list. Any time that we have a public notice for a project we go to this mailing list and that is who we mail to. We go to Post Offices and as many local governments that we are aware of that have an interest in the project. We missed Lincoln Borough because it was included in Elizabeth. Lincoln Borough is included in the mailing list now. I realize that it doesn't help any matters now.

MS. SWANTECK: All of our Council members are here now plus myself and we were very much upset about it because we felt that we should have been notified because it is coming into our area. Now, Lincoln Borough is wide

in size and small in population but we feel that if something is coming into the borough before we even have a chance to grow, if we start getting things that are undesirable, we can't grow. This is what we need. Our taxes are one mill and we would be going to the limit. We are going to sit here and listen to some of the other people and their comments to see what this is all about.

COLONEL ALVORD: Please, you are on the mailing list and I am going to ask you to please take the time to go through the draft Graphic Feasibility report and let us know what your concerns are.

MS. SWANTECK: We do have a lot of people here from Lincoln Borough and the residents of the houses, people who have been interviewed and I know the people who live there and I found out about it from Mrs. Bennet. So, like I said we are going to sit here and see what this all about.

MR. DIXON: Corsin Hill and Lincoln Borough, that is the disposal site.

MS. MAE PETERSON: I want to know if, and I am saying "if" this goes through, are you going to dump more sites in Bunula, we don't need it, we have enough. We don't need any more dumping sites in Bunola. We got the chemical plant, we don't need no more.

COLONEL ALVORD: You are talking about disposal

operations, right Ma'am?

MS. PETERSON: Are you going to dump more in Bunola? You get away with it one time, are you going to continue doing it?

COLONEL ALVORD: Let me address the disposal sites. We have done considerable testing of the materials in the river bottom in the project areas, we have to do that. That is an Environmental Protection Act. To date we have found no toxic or hazardous materials. Now, we are continuing to test and we will continue to test up until the project begins. At any time that we find hazardous or toxic materials, they will not go into the two disposal areas that we have identified so far. By law they must be handled separately. The two disposal sites that we have identified to date are not authorized for disposal of hazardous or toxic materials. We will handle them separately if we ever find them in the testing. I understand that disposal is a dirty word. Let me tell you what we would like to do and what we are doing at Grays Landing and why we are not doing it here yet.

(Whereupon, Colonel Alvord refers to the slide projector.)

COLONEL ALVORD: I wish that there was a better word than disposal. In some cases there will be broken up concrete that we have to remove from the project. Now,

our preference would be to use that material to environmentally restore an abandoned strip mine like we are doing at Grays Landing. This is the disposal area at Grays Landing. (indicating to slide.) I wish that I had a before shot, this was taken in the summer and unfortuantly some of the grass has turned brown. I think that most of you know what an abandoned strip mine looks like. We are taking all of the excavated material from the Grays Landing Construction site up the hill and restoring that old strip mine area to its original configuration, animal habitat and so on. We would look to do the same with this particular incident, but we have not found a site like that. However, we have selected the sites that we have because we have about one and a half million cubic yards of excavated material that we must remove from the river and we have to put it someplace. That is not going to be a dump. That material with soil and in some cases broken up concrete, will be placed in that disposal area n a similar manner to this and planted with vegetation. There s no hazardous or toxic materials there. If we ever find any hazardous waste, it will not be put there. We will take every effort to make it look like this when the disposal operation is over.

MS. PETERSON: You still didn't answer my question. If this site is in Bunola, what prevents you from

auling more stuff in later on down the road?

COLONEL ALVORD: We have a permit. We have a permit--

MS. PETERSON: Okay. Do you have that for a certain length of time or just for this project?

COLONEL ALVORD: You have it for a certain length of time and for the quality of the material.

MR. JAMES STRUT: I would like to point out that I am sure that everyone is aware of this nations infrastructure is rapidly declining, deteriorating. I don't know if I agree with your plan of the safety of these locks that were built in 1906 and 1908. We have lost a lot of industry and we have lost a lot of jobs n Western Pennsylvania. If we can work with the Corp of Engineers on the two for three plan and give us new locks and dams in which immediately generate new construction jobs, but more important, generate some new industry back into Western Pennsylvania. I would like to go on record in favor of the two for three plan. Thank you.

STEVE KADAR: I guess what we are mainly concerned about in Lincoln Borough is the dump site that you people have selected. One of these dump sites that you have selected is Corsin Hollow and there are ten homes there that are supposed to be torn down so that this site can be used for this dump. Like the Mayor said, the officials

in Lincoln Borough were not notified of this. We read about it in the paper and we got all kinds of calls from the residents. Those people were really concerned and it makes all of us concerned. Now, we don't have much of a tax structure in Lincoln Borough. We only have 1,140 people in the borough. We can't afford to lose any houses, we can't afford to lose any tax payers in Lincoln Borough. This is really going to hurt us and I wish that you people would reconsider another dump site rather than select a site where you have to tear down houses.

COLONEL ALVORD: I understand. The reason that we have selected the two sites that we have right now is because it had the minimum impact on a number of people, 14 homes. Now I realize that that doesn't help your situation so let me ask you for help. We simply have not been able to find other sites that are large enough to accommodate a million and a half cubic yards of earth without impacting the people at all. If you or any of the people from Lincoln Borough know or you think that know of a site, we will examine it, inspect it and try to find a way to make that work. Let me ask you to help us to try to resolve that issue.

TOM WOODROBIN: I am from Corsin Hollow and I am one of the people who are property owners down there and we wanted to know if they were coming there or not. We

were told Bunola and we were told Corsin Hollow.

COLONEL ALVORD: Yes. Those are the two areas that we have identified right now as having the capacity and having the minimum impact. Now I realize that this does not help you if you live there and I will make the same offer, if you know of other areas, please help us find them.

MR. WOODROBIN: Are they really coming there?

COLONEL ALVORD: No, sir. That is our proposal right now. If we cannot find other areas, if there is just no other alternatives, then yes, those will be our disposal areas.

MR. WOODROBIN: What is the time frame?

COLONEL ALVORD: At the time that we begin construction would be the time, so we are looking at 1996. There is going to be time before they sink the first clam shell or backhoe the dirt they are going to want to have our disposal operations set. We are looking in that time frame.

MR. RONALD O'SHEA: My concern here as Councilman for the Borough is the residents landfill sites down in Corsin Hollow and the possibility of loosing ten homes and tax payers. That is our concern.

COLONEL ALVORD: Again, I will extend the same offer, please help us find alternative sites.

Guffner

JAMES GUFFNER: I am president of The Mon River Towing Inc. We are a large company that operates on the Mon River and we are based in Belle Vernon. I am here representing DINAMO which stands for the association for the development of inland navigation in the Ohio Valley. It is an organization that was formed in 1981 in the offices of the Greater Pittsburgh Chamber of Commerce it represents a broad base of industry leaders, utility, banks, government leaders and people from this area who are interested in jobs in the Greater Pittsburgh area in industries here.

We appreciate the opportunity to be here tonight and tell you that we support Plan 1, the two for three project to revitalize the Mid-Mon Valley and the Lower Mon Valley. As stated in your talk, Dam 2 and Lock and Dam are vastly approaching one hundred years in age. When you see our tow boats and barges going through the locks it seems like everything is functioning properly. If you got closer to the lock walls you would see that year after year the deterioration and you can see very plainly that these structures are not going to last very much longer and if one of them should fail, the devastation would be great throughout the Valley and we would all be affected.

The 56 foot by 720 foot lock chamber at Lock 3 and Lock 4 are now incompatible with the new and modern

structures that the government has built and the rest of the Upper Mon Valley. By the way, the cost of these structures, these new lock structures, are now shared by commercial industry who now puts up 50 percent of the cost for new construction of these locks and dams by donations by the Waterway Users Fund which comes in the form of excise tax of diesel fuel for commercial operators along the river. We have a stake in this as well. Just to give you and idea of the tonnage that the Monogahelia River turns, n 1981 over 71 million tons transited the river systems in Western Pennsylvania. Of that, 38 and a half million tons have moved along the Mon River alone and that tonnage is expected to increase. A ton of coal can be shipped today less than the cost of a postage stamp these days on a cost per ton basis. There is no more fuel efficient way to transport commodities than by river. The main commodity is coal. The other commodities that are moved in this area are petroleum sand and gravel, chemicals and steel and scrap. These are the corner stones that built Pittsburgh and made this area what it is today. We certainly don't want to have to jeopardize or reduce our niche in this country and our edge in this world because nobody else has the advantage of using the three rivers as we do. The coal produced in this area is mainly produced for the consumption of power plants that

service this area. Some of you may even work in these places like Duquesne Light and West Penn Power. Coal is exported to areas like Canada for purposes of consumption and it is also shipped through Pittsburgh to rail facilities to be transported to other North Eastern facilities. The other main use for coal in this area, of course, is for the production of coke which is crucial for the production of steel. Actually, U.S. Steel Clairton Works is the largest consumer of coal in this area. There are other facilities in this area who also consume coal. Namely, LTV Steel and other steel industries who use coal in this area.

DINAMO supports Plan 1 because of the five annual economical development benefits. We have worked very hard with the Corp of Engineers and industries in this area to examine all of the plans and we agree that it is the most cost effective method. The cost of Plan 1 is 74.7 million dollars. 231 million dollars per year. The pay back in almost three or four years that is so crucial to this area would certainly pay off in a lifetime.

The real advantage of Plan 1, the two for three plan, over the three for three plan, with only two projects to maintain, there would be less maintenance cost once they are built to the taxpayers and there would be less delay to our product to market. That is the real distinctive

advantage from what I see in the two for three plan over the three for three plan.

What I am saying here tonight is that we need to go forward with this plan. If you realize that in 17 years from now, we get to the year 2003, we will have accomplished what has been tried to be accomplished in this area for over 25 years. I am second generation in the river transportation system and I know the whole history of the rivers in this area. I am from this area, I am from Charleroi. I can tell you that we will all benefit from this. You think that in 17 years we would accomplish something we will fulfill this area and keep it open for the next 100 years.

Thank you for coming tonight and listening, I appreciate the opportunity to speak, thank you.

KENNETH MURRAY: I have some property on Fallen Timber Run, Elizabeth Borough. This property has been n the family for a very long time. am concerned about the property around Fallen Timber because it has a had a tendency to flood over the years. I was looking though your feasibility study and I wanted to look for Fallen Timber Run and it is not listed, it s not on your map.

COLONEL ALVORD: If it is not there we can tell you what the impact of the project will be on that. It comes

into the Mon. Let me ask you to do this sir if you would. Will you make sure that you give your name address and phone number to Tom Scott and we will answer your questions for you.

MR. DIXON: I would like to extend that invitation to all of the residents in Lincoln Borough, Corsin Hollow and Bunola and anyone else who is interested. We are going to come out and meet with you and give you a detailed explanation of what is going on at your request.

WILLIAM KIEB: Just to reiterate some of Lincoln's concerns, one of the man concerns is the dumping sites that is one of the prospective places in Corsin Hollow. I was just wondering if in your study that you were aware that there s a Revolutionary and Civil War Graveyard in Corsin Hollow and if so, how does that affect any of this prospective dumping?

COLONEL ALVORD: We have to meet the requirements of the National Historic Preservation Act. That would have to be addressed. That doesn't mean that it has to be saved, there are certain procedures that you have to go through when you address on a certain historic aspect such as that. We just can't go in there and cover over anything and we wouldn't do that. So, that will be addressed. Again, if that exist there and we can find some other alternative, it would be our preference to find

another alternative disposal area.

MR. KIEB: Another question. What are some of the criterias that you use to choose a dumping site to dump disposal?

COLONEL ALVORD: I can give you a general answer, but I want to give you a more specific answer on this. Less, do you want to take this?

LESS: We have a couple of main criterias and one s the feasibility. The site has to be close enough to the river and this site. There are environmental considerations, economical considerations, historical considerations and things to that affect. One of the main considerations that we look at is the minimal impact on the community as a whole.

MR. KIEB: What about the tonnage on the roads and things of that nature getting from the Lock 3 area to the disposal site?

LESS: Those are also considered. There are some details in the plan that we haven't exactly nailed down yet. We have to look into the configuration of the access roads. Some of the details of the homes we haven't nailed down yet.

MR. KIEB: I know that Corsin Hollow is somewhat of a valley. Is this what you are looking for, a valley to fill in or could it just be on a spread of 100 acres or

something like that?

LESS: We have a million and a half of cubic yards of material. It is hard for me to come up with an analogy on an equivalent size for that demand, but if you are to take a thousand acres, I don't have my figures to say what that would be, but that is possible.

COLONEL ALVORD: We are not just looking for a valley to fill in, we don't look for big holes or valleys to fill in.

MR. KIEB: It couldn't be an open area, it has to be a valley?

COLONEL ALVORD: It could be, but like Less mentioned, there are characteristics, it has to be a large area, a large open area.

LESS: If a alternative site came between now and the construction period that was better, then we could use that site.

MS. JUDY KRAUSE: I have several issues to address. Some of you have talked to me before, The U.S. Army Corp of Engineers. I am here representing my family, my town, myself and several other people from the Mon Valley area that I know have the same concerns.

My Uncles are some of the people that you are dumping your river dredgings on and I feel that I have legitimate concerns here and several other issues to address.

One issue to address, it seems that Plan 1, which s the one that you have chosen to push through to Congress, only benefits the industries, the barge owners and it doesn't benefit the individuals who live in the Mon Valley area. In fact, Plan 4 seems to also benefit the people that have mentioned without causing detrimental effects to the people who live in the Mon Valley area. In fact, Plan 4 seems to also benefit the people that I have mentioned without causing detrimental effects to the people of the Mon Valley area. We all looked at your proposals and we decided that Plan 4 would work much better and we are recommending that you use Plan 4. We will push this all the wa to Washington D.C. if we have to. We are not gong (going) to give up.

Plan 1 has bad effects such as causing higher utility bills for the people in the whole area because of the water levels dropping between Elizabeth and Charleroi. A lot of the utility companies are going to have to build water cooling towers. If they don't build water cooling towers the temperature of the river is going to go up and then we are going to have environmental problems which we are going to have anyway if we get rid of the dam.

If you rebuild Lock 3 with a double lock system that is wide enough for all of your barges to go through there will still be benefits to USX The barge operators, the

boaters and all of the people that you care about obviously since you told them about it and not the local residents. There won't be any detrimental effects to the people along the river except for some materials that you are going to have to take out of the banks. Addressing that issue, whether you do that or whether you dredge the river between Elizabeth and Charleroi we will not allow dredging to be dumped on our town

(Audience applauds)

I am from Bunola. My grandmother grew up in that area, got married and had that area n her name and now it belongs to my uncles and you are planning on ruining it. On top of that, I have been told by some of your people at Fridays meeting that not only are you going destroy houses and dump dredgings in Church Hollow and block the road, which is going to affect a lot of people, but then you are going to give the land back after you ruined it. That is great, who pays the taxes on the land when you are dumping dredgings on it and it still officially belongs to my uncles? One of my uncles couldn't even make it tonight. he has emphysema, he is laid up in bed and he is on oxygen. My other uncle is right there he has deterioration in his hip, bone deterioration, he can hardly walk and he came all the wa out here to fight for himself and on top of that he has asthma. If you get him

upset, you might have a problem here. You are dealing with people who can't protect themselves. You are dealing with a town that isn't even incorporated. It has got what,three four hundred people in it. You are dumping on peoples homes who can't even protect themselves. Unfortunately, you have got people like me who are willing to fight and people like me who have contacts in this organization, people like me who are willing to go to Washington and fight and I will.

Other things that I have to address is I know of a lot of people who are looking for landfill. If you have to get rid of this dredging material or the material when you build the dam if you pick Plan 4. There are a lot of people who are looking for landfill all along the river area from the Mon through the Ohio and down the Mississippi.

The fellow who was here from DINAMO, he said that it was easy to carry things along the river. Why do you have to take all this material and dump it in one spot? There are probably thousands of areas along the river who are looking for landfill. You could probably sell it and make some of your money back unless it's toxic. If it is toxic, you have no right dumping on peoples homes and in their towns anyhow. That is the plan that I recommend to you for getting rd of your materials, sell it to the

people who want it, don't pick peoples homes.

I am sorry if I seem upset, but I have been talking to Bureaucrats for three weeks and I have been told all sorts of information, presumably true information which later I found out was not true that your Mr. Tom Scott and I have also been asking questions and getting answers like well, we made a study and we found that this is the best plan and this is why we are preferring it. I am sorry that does not answer my questions

Okay, thirdly, the people along the Mon Valley are poor. It is a depressed area, if you go through the town you will see a lot of the stores are closed, a lot of the houses haven't been painted, a lot of the people are working at the 7-Eleven or McDonalds or where ever they can work and they are barely making ends meet. If their utilities go up or they have to make their own drainage system on their property because the water level went down and whenever it rains it will be rushing down the gills (hills?) and it will flood their lands if they don't have a new drainage system, if they have to pay all of these new extra costs, a lot of them will be driven past their expectations. They're either going to be driven to where they loose their land or they will be driven out of the area or maybe they will give up and shoot themselves. But, in any case, they are not going to be able to take it too

well. USX, The barge operators, all of these people, even some of the utilities will benefit, they will also benefit from Plan 4. It might not be by this much or not by this much but they will all benefit from Plan 4. They will still have an hour and a half delay going through the locks at Lock 3, but it will still be a benefit and not cause all this harm to the other people in the Valley. We recommend Plan 4.

Also, another bone that I have to pick, people were not adequately informed about this. Look at this, we should have standing room only here. I have been spreading the word, I called newspapers and Television stations and I have been hanging posters. I have been spreading the word to local politicians myself. You have not done your job. At least you could have sent out flyers to all of the individuals who live in this area so that they would of at least known about this meeting and what their plan was. You didn't even do that. You say that you sent out information to post offices and representatives. You didn't follow up and make sure that the people in those areas got the information.

It is very easy for you to say "look we have got this plan nobody opposes it". That is very easy to say when nobody knows about it. You may have the support of the companies, you might have the support of USX and the barge

operators, but you don't have the support of the individuals and you don't have the support of the people who plan on dumping your dredgings on, your river sludge on. And I don't think that it's fair that you try to sneak it past us especially when public comment ends in just a couple short weeks.

Okay. Back to Plan 1 and Plan 4. In my opinion, and almost everyone that I have talked to, Plan 4 adequately does the job with the least amount of detrimental effects. I want to know why you chose Plan 1. I can guess that it is because if causes "you" the taxpayers the least amount of money, but it passes a lot to the residents of the Mon Valley area. I can also guess that you did it because without Lock 3 a lot of the companies are supporting you because they can go up and down the river faster with a little less cost. For the people as a whole, for the tens of thousands of people who live in this valley, you are talking about getting rid of peoples homes, I want to know why you are not using Plan 4. I don't want to hear that you did studies and you found that it was the best.

COLONEL ALVORD: Do you have more questions, Ma'am or are your through?

MS. KRAUSE: Yes, I do, but I want to know why you chose Plan 1 instead of Plan 4.

COLONEL ALVORD: You don't want to hear that we did

the study so I am not going to tell you that we did the study. I don't have the time here with these people here tonight to take you into detail, but let me offer you this. We will sit down with you at your convenience and go through exactly what our requirements are and how we did the analysis.

MS. KRAUSE: Can you admit that Plan 4 does the job and does it well?

COLONEL ALVORD: No, no. Wait a minute. You are making a general statement and what I am telling you is that we have a process that we have to follow. In economics, the formula that we are required to follow has the lowest overall cost in Plan 1.

MS. KRAUSE: To whom, the lowest economical cost to whom?

COLONEL ALVORD: The Government and the greater community.

MS. KRAUSE: The greater community. I can remember seeing 111 million dollars that is going to be passed on to the people of the community. This is their own cost, this is their taxes.

COLONEL ALVORD: This is an estimated cost.

MS. KRAUSE: And probably a low estimate.

COLONEL ALVORD: I can't tell you if it is low or high, I can just tell you that it is the best estimate we

have at the time. That estimate, by the way, was given to us by the property owners. That is not our estimate. We went to the people who had private facilities and asked what it would cost to relocate or replace. We don't have the time tonight to go into detail, but let me make this same offer to you. First, make the same offer on the disposal operation. Our desire is to not impact anyone. We have to determine the best aspects of how far we have to carry and all that kind of businesses. If you know of other area or you can generate people who can help find other areas, that is precisely the solution that I am looking for.

MS. KRAUSE: What about the steel mills, what about the lands that are owned by people and not being lived on.

COLONEL ALVORD: That is what we are asking help for--

MS. KRAUSE: There are areas on your maps like that.

COLONEL ALVORD: We looked at all of the ones that we know about and they didn't have the capacity to handle one and a half million--

MS. KRAUSE: Split it up.

COLONEL ALVORD: You can only do that so long before the cost becomes enormous.

MS. KRAUSE: Sell the sludge, if it is clean, sell it for landfill.

COLONEL ALVORD: Again, we can sit down and go through all the details on how we arrived at what we arrived at.

MS. KRAUSE: I have sat down with a lot of your people. I have sat down with (inaudible) I have sat down with Tom Scott, I have sat down with a lot of your people and I have been told what you are telling me now. You feel that it was best and you don't want to go into details.

COLONEL ALVORD: I am telling you that we will go into the details, but unless everyone here want to sit here for four hours while we go into the details, I don't think that is productive.

MS. KRAUSE: I would rather sit here and listen to the details than sit here to listen to someone from DINAMO.

UNKNOWN SPEAKER: Very good, I agree with you whole heartedly. I don't have the floor, I apologize. I have been sitting here and watching what has been going on here and I can honestly say, I live on Upper Corsin Hollow Rd. Upper Corsin Hollow and Lower Corsin Hollow have always been chosen for potential dumping sites. When we first built our home, USX is right across the river from my home. We get all the advantages of the sulpher dioxide and all the cancer producers and chemical waste that was

going out into the river and causing potential harm. I have gone through all of this. (Inaudible)

What I am saying, USX, I agree with this young woman, has the backstream of things, it is the advantaged person here, not the small people, not the residents. You're saying that we don't want to take up your time here. We are interested, that is why we are here. I want to also add this. It seems that the business person is always the one. I think that Lincoln Borough is fit on coming here, the Mayor as she said was not even notified. That is poor planning. That is not a policy accepted to say that we were on the wrong mailing system? What kind of planning do you really have? That is how I feel and everyone else in this whole room. To think that you people are engineers, they know where they are going to dump it, but they didn't know to tell us. They didn't even know where we lived. You mailed it to Elizabeth? We live in Lincoln Borough. You knew on the Plans. I cannot accept that, that isn't right.

MS. KRAUSE: That is incompetence.

UNKNOWN SPEAKER: I have listened to you whole heartedly and I will support you and I will help you myself. I am going to do all that I can to make sure that justice will be dealt. She has a lot of innovative ideas and I think that you all should stand behind her.

This is all new to me and I don't want to take up any more of your time. I feel that we are being presented with Plan 1 opposed to all the other plans and there is a lot of reading between the lines that is not being presented to us. I think that at that point we should all hold that hold and hold it firmly until we know that these people are up front with every single move.

COLONEL ALVORD: Okay, I will make the same offer. We will come and sit down and talk to you and Lincoln Borough or any place else and go through the whole process. We will go through all of the considerations that we are taking into account, but please recall what I said, this is plan is not locked in concrete. We have gone through analysis that we are required to do and at this point in time that is the plan that comes out in the far end. What we are here for tonight is to ask for your help to identify things that we missed here.

UNKNOWN SPEAKER: I don't trust you.

COLONEL ALVORD: You don't trust us? Ma'am, I don't know what else to do. I am offering you the opportunity to come and work with us. We are the agency that has to propose the plan and we are giving you the opportunity--

UNKNOWN SPEAKER: All right. I will go another step forward. I will be willing to work with you, but on the other hand, are we going to talk hip to hip? I am a

registered nurse and I am also an artist and I have a lot of creativity and I feel that I could help. I have all of these different things crossing my mind, but she is bringing in some real honest heart felt feelings here. In between reading the lines you are saying who are the benefitors here, the people who have the dollars. You are not worried about the little person. The little person has no way to fight back. That is the way it is in history, because what is right is right. Justice will prevail. I think that if you want to separate it, divide it up, let USX--this has crossed my mind, what part, if any, has USX played in participating in this? They benefit from this whole heartedly. Are they involved in giving you money towards--I am not saying that in a derogatory sense, I don't mean that.

COLONEL ALVORD: You mean are they contributing to the study effort, no.

UNKNOWN SPEAKER: In any way shape or form because they are the benefitors from this.

COLONEL ALVORD: They are one of the benefitors from this, yes.

UNKNOWN SPEAKER: They are a major benefitor. People here are worried about their homes and if they are going to be taken. I live on the upper end. I might not have my home taken. We are talking about sludge and potential

disease being brought into here. My home isn't the only home involved. I cannot accept the fact that homes are not readily involved with this. I think that you should take a closer look at that engineering report and see how many homes are directly involved. It isn't just a handful, it's plans.

COLONEL ALVORD: I understand and that is exactly what we are asking for that kind of imput. I don't like the term little man. I will tell you that is the reason that we are here tonight. I know that the corporations and the towing companies support the plan for obvious reason. Less time, lower cost which hopefully would be passed on to customers and passed on to their customers and so on.

UNKNOWN SPEAKER: Passed on to them--we will pick up the tab--

COLONEL ALVORD: knowing that we have industry support, that is why we are having this meeting to ask your concerns.

UNKNOWN SPEAKER: The concerns are Plan 1, that is not what we are saying. We are hot and we don't want it there. That is the point mentioned today. We do not want it on Corsin Hollow Road in Lincoln Borough period.

COLONEL ALVORD: Okay. I make the same offer that I did with everyone. Please work with us in identifying alternatives. That is the offer that I make.

MS. KRAUSE: I just want to conclude here. My conclusion is that Bunola is a small town and it is full of poor people. It is not even incorporated, it doesn't even have a mayor. We don't even have any real public places except for maybe the post office. The whole valley is full of people who are in the midst of a depression no matter what Bush says. But, that does not mean that we are not gong to fight. We will fight if you choose to cause harm to us. We will fight it all the way to Washington D.C. and the Supreme Court if we have to. If it takes civil disobedience, you will get it. Just keep that in mind.

That is all that I have to say and that we recommend Plan 4 and most of the people do too. We know that Lock needs to be replaced. We know that it is in bad shape. We recommend Plan 4 and we recommend selling the material that you dig up or putting it in a bunch of little areas that nobody is living on. If it is not toxic and if it is toxic, you had better find something else to do with it or clean it up.

That is all that I have to say.

MS. LILLIAN MARTIN: I have been to your office but you were too busy to see me. You went right by me. I didn't have a chance to talk to you. I am bringing my concern here to you because I was down to the Corp of

Engineers and I was concerned about the location in which I live. I don't know if you are going to raise the river or lower it. If you are going to raise the river five feet, and I was concerned because in the vicinity where the Youghogheny and the Monongahela meet. I have been there for 35 years and I have never had any problem with flooding. What I saw going on at the end of my street I wanted to know what was going on. All that I could see was that they were putting down into the river. I could see down to the river because they cut all of the trees down. Now, if I could move from this vicinity tomorrow I would. My husband and I have been on a pension for the last 17 years and we have put our income into the home that we are living in and it is a nice little community. I have built up my home and I have made it a home. I went to City Council after I visited your office and they were very concerned about what is going on. To be truthful, I don't know if they even knew about what was going on because they were very interested. I have received the maps showing the level of flood control and as that map shows my house was right in the end of that flood control. If we should have a flood, it would come right up to my home. I was told that was a hundred year presentation of a flood. Now, the only thing that I have to offer you today is that I was given a questionnaire and on the

questionnaire they were concerned about the fish life, the wet land, the historic properties and the flood hazards and I answered each one of these. When it came to the animal fish and wild life, I was concerned about the human life. In that vicinity, that is a residential area in certain parts. Most of the residential areas are occupied by elderly people who have been there 50,60 and some years. They can't move anywhere else, their livelihood is there, that's where they live. They have been paying their taxes for 50 or 60 years to a community and we haven't received any attention.

The other thing that I am concerned about is can the Corp of Engineers act in Eminent Domain?

COLONEL ALVORD: The procedure that is used is called Eminent Domain. We just don't jump into that. I would prefer refer to sit down and look at where the flood lines are in relation your property.

MS. MARTIN: I am not speaking of my property as being Eminent Domain. I am speaking of the river front. We have a boating area down there and the people along the river have lived there for years and years and they wanted to have property along the river. The river front has become valuable property, everyone is buying it. They have claimed some of the river front property as Eminent Domain. There has been property torn up to the garage of

one of the owners. When the Mayor of McKeesport found out that they had taken the property way up to his garage he had landfill put in there. So, I was concerned of what Eminent Domain would mean to any of these people.

COLONEL ALVORD: I can only explain what it would mean from the Corps standpoint in relation to this project. I hope that we don't have private developers claiming Eminent Domain because they don't have that legal jurisdiction. Only the government can claim Eminent Domain. I am not sure if you are talking about developers coming in the riverfront or not.

MS. MARTIN: I would assume that it would be the boating area. I haven't talked to the gentleman in charge of this. Tomorrow I will talk him, he has been on vacation.

COLONEL ALVORD: From my standpoint Ms. Martin, Eminent Domain is our last alternative. Our preference is to sit down and work with the land owner and find other alternative. On the other hand, we will see if a permit was requested and issued and we will get back to you.

MS. MARTIN: You are talking about taking the concrete and putting it people's real estate or where ever you were putting it. I have watched those trucks coming past my house 24 hours a day for several weeks carrying debris or and taking it up 837 across the river from

McKessport and that's coming down my street everyday. My house has been pounded with dust. Why was this person permitted to take this down the river.

COLONEL ALVORD: This is not a Corp project, Ma'am.

MS. MARTIN: That is where the dock is being built.

COLONEL ALVORD: It still is not a Corp project.

MS. MARTIN: He would still have to have permission from the Corp.

COLONEL ALVORD: Only if there is construction and we are going to check tomorrow to see what is going on and if a permit was issued.

MS. MARTIN: Also, if he has a hauling permit.

COLONEL ALVORD: That is the state's responsibility.

MS. MARTIN: These are the problems that I have. Now, if I could pick my little tent up and move, I wouldn't be here, but I can't. I put my life savings into that home and I plan to do everything I can to rehabilitate that community. If you raise that river I know perfectly well that it is going to come up even to my street. This is what I would like to call you attention to. Thank you.

MR. DICK GERINGER: Good evening. I am past president of the Waterways Association for Pittsburgh and Manager of Dick Barge Company. For those of you who do not know what the waterways association is it is an organization in the Pittsburgh area made up of different companies that operate

in Pittsburgh or in the Pittsburgh area that deal and operate on the river. Some of the members are support companies. We are here tonight to give full support of the Lower Mon River, Lock 2,3, and 4. A new gated dam and rehabilitation of Lock 2 in Braddock and removal of Lock 3 in Elizabeth. The gated dam at Lock 2, why would you want a gated dam at Lock 2. I think that is a better way to present this. From some of the things that I have heard here, right now we have a fixed crest dam down there and you have heard the problems of the structural foundation of this fixed crest dam. The advantages to the gated dam over the fixed crest dam are unmeasurable. What you have on a fixed crest dam is a stone wall to hold back water. The only water or flows that can get over the dam are flows that are greater than what the river can hold or what that lock can hold and then it goes over the dam. On a gated dam, you don't have that. A gated dam has a number of different positions which can be raised and instead of the water going over the gated dam it goes under it. What that allows for is the kinds of high flow laying within the river. The chance of flooding becomes a lot less than it would be with a fixed crest dam.

By removing the dam and lock at Elizabeth would also help cut down on the cost of the project. Not only that it would also help to keep the tax payer dollar down, I think

that is very important. The tax payers are helping to pay for this so in any way that you can keep the tax down it is worthwhile for the growth of the area

The twin 84 by 720 lock is the finishing project of the lock system on the Mon River. That will modernize the Mon River to where it should be so that industries in the areas can compete if you have a manufacturing area within your community and they use the rivers they can become more competitive, they can grow. I think that we are looking for more growth.

If you want to compare the Mon River right now so that you can understand it a little better, just picture yourself coming down a highway with three way road in front of you and you travel that road for about 50 miles and you come along and all of a sudden boom there is one lane and all of the traffic is merging into it. This is one lane and all of the traffic is merging into it. This is what we have on the Mon River and this is what we would like to do away with. If we don't do anything at all what can happen? Well, we can have a failure, a possible failure at Lock 3. What would that do economically to the area? Companies such as U.S. Steel, coal mining companies and other companies that move their products by the river, it would be a disaster. It would cause cost of operation to go up, power plants could no longer get coal to go into their plants by the

river there fore raising cost of their developing power which would be passed on to the consumer.

The Pittsburgh area, the effects on the rivers in the Pittsburgh area, we are not just talking about a few companies like USX, this would effect jobs. It was estimated that if we don't have proper navigation within the rivers system there would be tens of thousands of jobs lost or effected within the Pittsburgh area.

Pittsburgh is the largest inland port. It is also the fifth largest port and that is including each water port. That s something when you think about it. Pittsburgh is well known throughout the whole country. The important thing to remember is because of the rivers in Pittsburgh, Pittsburgh is what it is today. If we want to continue to grow and develop in the future, it has got to be because of the rivers.

Let's not forget the recreational aspect of the river. I think that it is important that recreation is considered in all of the development here. I think that anyone who has a motor boat or is a fisherman who loves to go out and get into a pool such as Lock 3 and have 33 mile stretch of river that are well used. Pittsburgh is now the largest recreational boat ownership within this country. That is unreal. You would also have the raise in the Youghiogeny River which would make that a fishing paradise. It would

also give recreational boaters to use it more than they are now. You would have a recreational paradise for people to go out with their families on weekends.

We can only thin positive things on the Lower Mon improvement on Lock 2,3 and 4. We give this project full support and thank you for the opportunity for listening to this.

UNKNOWN SPEAKER: I am here representing the Sierra Club. We did not receive any notification of this particular problem. I read about this meeting in the paper so I am not really prepared to give a presentation this evening, but there are some things that I would like to bring up. First, is the water level pertaining to USX Clairton. My understanding is that there will be an increase of five feet. I am not sure if this information is correct or not. I do understand that USX has a water problem, brown water problem in which the DEP DEA is very worried about with the increase in the heights on the river. Also I am very worried about the toxic contents of the sludge. You have calcium chloride on the banks across the river from USX Clairton which has been leaking into the river for quite a few years and of course, you have a coal facility down there all along the river it has been leaking into the river. Then, the area where USX is has created a problem of particulates in Liberty Borough, Port View and Lincoln

Township are now in noncompliance for the PNN standards which is going to effect the whole community because (inaudible)--The EPA will be presenting a notification air pollution control that they did not leave the (inaudible)--and a letter will go out December 1 and with it it will bring road sanctions, which measns that bridge work will cease in the area and two for one offsets any industry. These are all very important issues and they are all sites in Lincoln Township. We also have the sulpher dioxide. My main concern is air pollution and toxic waste. How the site would be handled as to the procedure for filling in the area and finishing off the project. Also we are very interested in seeing the toxic reports that you mentioned previously. That is all that I have to say.

MS. RENEE BUCKA: I am here today because I am a resident of Bunola. I have a lot of questions and concerns. I am worried about the characterization content of the sludge. You said that you would check it for toxic elements. Did you check for (inaudible) or priority pollutants? Did you run an environmental impact study if you did, can we see the results? My concern is what if it migrates into the creeks, there are a lot of creeks in Bunola. How far did you go in the study as to what the run off would be of the sludge? It is my understanding that sludge has a 90 to 95 percent (inaudible) that when you

bring the sludge up from the river and this is my concern, how are you going to transport it, how will you manage the water run off and what is the program for the material. I have concerns that if you moderate it and you said that it is not toxic, but the people West Penn, Duquesne Light, these people go up and down the river. I have four pages from the toxins that the EPA has designated as having it, have all the pages been checked?

COLONEL ALVORD: The testing protocol that we set up was based on the history of the river. So, if there was any inclination, that there was some factor along the river, that had know pollutants, then that would be on the list for things that we check for. Again, we haven't any of those things in the testing today, if we do, that changes the whole disposal operation.

MS. BUCKA: How many places have you checked, did you go once and pull up something and check it?

COLONEL ALVORD: No. I can't tell you an exact number of tests that we have done so far, Less?

LESS: We took periodic samples along the river to try to give us an idea of whether we had a problem just for planning purposes. Before we get into the final plans and specification for the disposal we have to do a lot more test. The priority test that you talked about we are getting to them.

COLONEL ALVORD: We are not just testing along the rivers, we are also testing where sediment tends to collect like behind the existing dams and those kings of things.

MS. BUCKA: Another concern is what type of equipment ae you going to use in the transportation of it? What if it spills on the road, who is going to clean it? Do we have to drive through this? Will our children walk through it? Have you looked into sealed trucks to keep the liquid in as you are transporting it, are you going to transport it in trucks? How far are you going to transport it? When you get there, is it going to be wet or dry? Are these types of things going to be looked into further, will we know about this before you pick the site?

REPRESENTATIVE OF THE CORP: I would like to respond to that. I would like to make an apology especially to Lincoln Borough, we missed you, we made a mistake, we should have met with you the home owners to get you informed with what was going on here so that there is no surprises. There is nothing worse than finding out at a meeting like this what the plan would propose. I apologize.

The questions that you have are excellent questions. I can get into detail now or meet with you at a later date or come to your home and answer these for you and your neighbors if possible. We have intention of hauling sludge up there and disposing it. We like to work with you

and the community and we don't plan on doing anything unless DER concurs on what is to be removed. DER is our regulatory aspect on disposal.

MS. BUCKA: I am not saying that I resent this program, I just want to know the facts before something comes up because I have several years experience with a chemical corporation and I know that these materials can be put to some good use. (inaudible) I know that it can work, but my concern know is I have seen it in the office and now it is coming to me in my home.

COLONEL ALVORD: You mentioned an environmental impact statement, a draft environmental impact statement has been prepared and it won't be finalized until we can address these kinds of concerns.

MS. BUCKA: Will we be able to see that?

COLONEL ALVORD: Absolutely. It is available for the public right now.

LESS: You can get that at your local library I am sure of that.

MS. BUCKA: Okay, I guess that about covers everything. I would like to thank you at this time and I defiantly want to know more about this and be more involved.

COLONEL ALVORD: Thank you.

DAVID PUGH: First of all, the one thing that everyone has to realize is that there is several plans being considered here. Nobody is saying to let the locks and dams fall apart. Two of the plans in consideration are Plan 1 and Plan 4 the three for three plan will increase the size of the locks, will fix the dams, will create a dam at Lock 2. So, no one is proposing, there isn't a (inaudible)--no matter what happens, that is the effects.

Now, looking at the economic analysis in Plan 1 versus Plan 4. It is really interesting because in looking at the Plan, the code policy is about the same, there is a difference of about four million dollars maybe a few million dollars, but small, a few percents. The differences in the benefits is also under ten million dollars. The difference is that Plan 4 cost the local private land owners, the power utilities, the water treatment plants that are privately owned, one hundred million dollars less and I can understand The Corp of Engineers point that our cost is lower than in Plan 1, but passing on one-hundred million dollars in cost to an area that is economically depressed doesn't seem like something that is going to be minimized or even accepted in the local area.

Second of all, some people have brought up the environmental concerns. According to the Pittsburgh Press The DER opposes the plan of lowering the water level

between Elizabeth and Charleroi. I can understand why because there are several (inaudible)--Clairton Mills, all of those are concerned with the change in water level, removing the lock would reduce the moderation of water all of those would have an environmental impact and I don't think that has been properly addressed yet.

You asked for alternative dumping sites. Well, looking at the maps up there, one mile south of Bunola side seems to be the area roughly the same size, but it is not charted as being inhabited. On Friday, I talked to your people and they said no we haven't considered this area.

This is not clear competence. If I can look at a map and in five minutes find an area that does not have any indications of dwellings that seems to be the right size, that seems to have the right geography and I talk to you people and you say no, we haven't considered it. It makes me wonder how well you are doing your job.

Another thing, if you look at the traffic on the river, now the Dinamo people said that it going to increase, well, okay, I can believe that. But, currently, we do not have the capacity problem. You don't see barges lined up for 30 miles waiting to go through the locks. You don't have the delays of two or three days waiting to get down the river system. What you have at worst is oh,

I have to stop(inaudible)--based on the other side of the locks or oh, I have to stop at this town to get through the locks. One of the people from your department said that the difference of having Lock 3 down, renovated and replaced and removed is something like one and a half hours and transportation in whole is cheap. That extra lane of barge carries how many hundreds tons of coal does not seem excessive.

Okay, final comment. I have looked at your final analysis on the sludge. You took samples from 21 sites. This sludge is basically mile by mile two feet deep. Then you are going on saying that further analysis of taking 21 handfulls of dirt from that amount and saying "Oh gee, it looks clean." (inaudible) Basically, I think that it is impossible to view that analysis with that small sample. For example, one of the examples showed 30 milligrams per kilograms of lead in the soil. Now, there have been some recent studies that showed that lead levels cause mental retardation in children. Quite frankly just in gardening areas where people are growing food which has creeks running through the area and presumably it is getting in the ground where some people even still get their water from springs. This is not reassuring and that is basically all that I have to say.

COLONEL ALVORD: Tom, did he indicate that site, the

MR. TOM SCOTT: I am not sure, I didn't talk to him.

COLONEL ALVORD: Okay. Let me ask first, any sites that you are aware of that are in your estimation to be worthfull, please let us know. I guarantee you those will be examined.

Second, you are right, 21 sites so far, but that is not the end of the testing. So, yes, clearly for the few sites that is not the end of our testing for toxic materials. Thank you.

MS. NANCY WILLIAMS: There are a couple of things that want to say. I am just concerned about the people who live there. They have lived there all of their lives. It's a small town, (inaudible) that is exactly what's going on, people just don't care about us. You go up the river and you get a one lane road. (inaudible)--and that why these people are upset, that is how they feel that everyone is feeling about them. They don't mean anything. We have to fight for ourselves, we have to get angry, we have to say hey, stop it now. We somebody to care about us and our people and the children. I have three granddaughters growing up in Bunola and I am concerned about their health and their welfare. That is basically all that I am going to say that we have to make people think,

these people are human beings. They don't deserve this double talk, they deserve a chance to live like everyone else even though they are not as wealthy as maybe people from these towing companies or whatever. They deserve to have some consideration and they don't deserve to have their homes and everything taken away from them. That is basically all that I have to say.

(Audience applauds)

COLONEL ALVORD: Thank you. Is there any questions or comments?

UNKNOWN SPEAKER: I just have one further question concerning what is down in Corsin Hollow. These people, I don't know if they are right or wrong, but I hear these people talk about these surveys and so on. You came in told these people not to do any more construction on their homes and do not repair them and they have been there 22 years. Do you think that is right that these people can't even fixed their own homes? Do you think that it is right for your people to do this?

COLONEL ALVORD: I was not aware that those kinds of comments were being made. I will have to check into that further.

UNKNOWN SPEAKER: How long do you think it would take to set up a meeting in Bunola?

COLONEL ALVORD: Whenever you can get the folks from Bunola together I promise you that we you will be there.

UNKNOWN SPEAKER: I work for the Allegheny County Department of Development and we work with funded projects everyday. I know of river projects on the banks that will be affected if the water levels come up. What s going to happen to our federal funding there? Would you redo what is there?

COLONEL ALVORD: That is a municipal facility that you are talking about, right?

SPEAKER: Federally funded.

COLONEL ALVORD: That would be relocated, raised or whatever necessary will be made at federal cost.

SPEAKER: The facility will be lost?

COLONEL ALVORD: Yes, Ma'am.

SPEAKER: This is for the corporation of boaters and I resent the fact of the owners of the barge companies coming up and saying that recreational boaters like getting rid of Lock 3 to give us access to a larger range of river. I don't know of how many recreational boaters love going down past the Clairton Mills. Believe me, most of the recreational boaters that we boat with go up river and as far as the giving us a rebate or persay or giving us a cut on our utilities

I just had a utility bill and on the same bill I was told that I was getting a rate reduction on one page of the letter and on the second page of the letter it was counteracted by the(inaudible) I don't think that the people are going to donate--the boaters that know, I wish that there were more here, but the boaters that I know are looking at Plan 4 as a better plan. I have a lot of friends from Bunola and a lot of people up and down that river. I think everyone--we might have to pay more taxes on Plan 4, but everyone's taxes are going up anyway.

SPEAKER: I am from Lincoln Borough, and I am concerned with the raising of the pool of five feet. What about the highways, if you are going to bring that up five feet we are going to loose Oakdale Hollow and (inaudible) There are buildings that won't be there if this goes up five feet. We have good buildings there where we have some good income from.(inaudible)if the pool is going to up there, they are going to close up because the river comes up at normal times and it floods us. You go down Corsin Hollow and the river comes up there. Now, if you raise it five feet, it is going to flood steady.

COLONEL ALVORD: From what we know now it doesn't flood the main roads?

SPEAKER: The normal rain floods the road, it is not bad.

COLONEL ALVORD: Let me give you an example.

(Whereupon, Colonel Alvord makes reference to the slide projector.)

COLONEL ALVORD: Okay. Fixed Crest Dam and Gated Dam. If you look down here on the 12, this is the kind of dam that is at Braddock right now. This is the kind of dam that our proposal would put in, a gated dam. If you have a lower crest on the dam you can see that. This is what happens whether it is a normal flow or flooding. It controls over the fixed crest dam. Over here at the gated dam you can control that so that you actually have certain flows. We are talking about 900 cubic feet, that probably doesn't anything to most of you, but just look at the difference here with a fixed crest dam out here 728 feet elevation, almost 729 here, 723 so you have better control and in most cases particularly in flooding conditions, you have lower flooding elevations, less flooding that you have right now with a fixed crest dam.

Specific questions in Licoln Borough, the roads and those kinds of things we would be more than happy to meet with you and take a look at what normal river elevations and various flood levels and the roads and that kind of thing

SPEAKER: How long is the proposed dredging going to last? On you chart back there the hauling road from the river up to Church Hollow Road, how long would that dredging take place?

COLONEL ALVORD: Two years.

SPEAKER: Basically, River Road is uninhabited except for the town of Bunola. You have this whole river bank and you come and do it right where people live, I don't understand that. The whole road is uninhabited. It goes five miles this way and five miles that way.

COLONEL ALVORD: Are you talking about alternative access so that you wouldn't have to go through a residential area?

SPEAKER: Right. There are practically no other people on either side of Bunola.

COLONEL ALVORD: I don't know the specifics, but we will examine an alternative access. I am going to ask you to give us some help here with this.

MS. KRAUSE: I would like to make a comment. You keep saying that you will be in touch with us and I know that we will have to go through Tom Scott. I have dealt with your Tom Scott and he is not a reliable source.

COLONEL ALVORD: We will make sure that the

necessary arrangements are made.

SPEAKER: With these new locks and bigger chambers, is that going to increase the navigation channel?

COLONEL ALVORD: The navigation channel will be as it is now.

SPEAKER: These people who are going to be repossessed of their property, will they be compensated?

COLONEL ALVORD: Absolutely.

SPEAKER: Okay everyone, you will be compensated.

(Speaker is inaudible, never used microphone.)

SPEAKER: What kind of a table do you use to determine how much money you will give us for our homes and can we afford to buy another home?

JIM: What we normally do is we secure a contract appraiser who is familiar with the area. The appraiser will appraise the property, the lot value at a fair market value and we will negotiate that price. If there are relocation benefits involved if someone has to be relocated, if you have to buy another house, moving cost and things like that.

COLONEL ALVORD: So, there is not a set table. It is a process of going through the appraisal process. There are some relocation benefits that are available and so on. Our position is that we are going to do our best for the folks if we can.

SPEAKER: First of all, I have been told over and over again that they come up with a plan and then they pass it on to the federal contractor to essentially do all of the work. The two things that I want to be sure of is contractors in the Pittsburgh area are unemployed(inaudiable) The second question is there is going to be a half million trucks driving by my house for two or three years. Do we get compensated for the noise and everything else?

COLONEL ALVORD: Okay. First question. We develop a plan and we put that in contract form. The contract for Grays Landing just for example was contracted in detailed specification and at that construction site we have what is called a resident office. A staff of engineers and technicians and quality insurance people who's job it is to check and see that the contractor is doing everything that is specified in the contract. We don't just turn it over to contractors and let them run free there is controls on that guy. We check the quality and the time and the safety and mechanical equipment. Whether or not he is using the disposal as has been established and all that kind of thing.

The second question is that we look at the impact of all the operations, the construction operations.

For example, we just don't go in--well at Grays Landing and Point Marion where there were safety considerations and there were folks who lived along there, we went and negotiated with those folks to compensate for the dust concerns and the safety concerns and all that kind of stuff. I can't say what the specifics will be of the issue, but that is the way we will operate. Does that answer those two questions for you.

SPEAKER: When you take Lock 3 out, what do you plan on doing with all of that concrete?

COLONEL ALVORD: If it becomes part of the disposal operation, it is not something that sits on top, it becomes base material.

SPEAKER: When you figure your cost are you going to figure in the cost of fixing the entire road that you are going to destroy with the half of million trucks, has that all been considered? Penn Dot hasn't fixed the roads in Bunola for 10 years. How long are we going to have to wait for your to fix the roads after you destroy them hauling that concrete up from Lock 3?

COLONEL ALVORD: Perhaps you would get them fixed faster this work than if you had to wait for normal operations. I am not trying to make a joke. What I am telling you is that it is written into our contract. Whatever disposal access road is used, that contractor

will be required by his contract to repair and put back, in fact, to its original condition in fact better, before he leaves the site.

SPEAKER: Church Hollow Road. Is it in your proposal to fill in that valley and close off that road? Church Hollow road is supposedly where you are to dump at.

REPRESENTATIVE FROM THE CORP: It won't be sealed off, it will be temporarily closed and when we are done, the road will be reconstructed.

SPEAKER: Our concerns, I think from Bunola are in regards to the types of materials that you are going to be dumping there. I don't know if you realize that when we have had very severe storms, the water that poured down through our cove there and have washed out three times more so since the stripping job gone down back three years ago. Our concern is with this disposal site is what that is going to mean to the community.

COLONEL ALVORD: The only thing that I can tell you is that it would probably be in better condition as we proceed with the disposal operations. We construct disposal sites, we don't just go in and dump them, we don't fill the big hill in which the rain can come and wash it down the hill. Drainage channels are put in, sedimentation ponds are put in, there is a scheme engineered into that disposal operation to prevent that

kind of thing to occur.

MS. KRAUSE: These people's whose houses are going to be taken. I was told on Friday that you are not even going to buy their land and let them live somewhere else, that you are going to do an easement by taking their land and dumping this sludge and dumping it all over the people in Bunola, the houses that are going to be used and then when you are done, they will have to pay all of the taxes on it while you are using it, then when you done you are going to say "here, you can have it back" what are they going to have back, are they just going to have a grassy plain with no homes or pipes or electricity or nothing?

COLONEL ALVORD: The answer to that is first, there has been no determination as to what the real estate policy will be. Now, one of the options would be to purchase the structure, not the property. That is the kind of an approach that the Washington folks favor. We just discussed that very issue the other day and we have options to do other things like purchase the land. The only thing that I can tell you is that no determination has been made on the real estate policies. That particular approach has been decided as the approach that will be followed.

MS. KRAUSE: What do they get back, they get back

nothing, you don't help them to rebuild their home.

COLONEL ALVORD: Again, you are right if that were the policy. I will just tell you that I understand the concerns of that approach and it is not going to be the assumed approach. I understand what you are saying and I understand the concerns of the property owners and we are going to do what is best for the property owners.

SPEAKER: You still didn't answer the question. If you buy the house and not the property, if that is the case, when the property owners return, what will they have?

COLONEL ALVORD: They are going to have a piece of property that will be vegetated, that will be safe, animal habitat

MS. KRAUSE: And nothing else.

COLONEL ALVORD: That's right.

MR. TOM SCOTT: The school has just asked me to make sure that we terminate and we are out of here by 10:30. I know that there are still some of you have lots of questions.

SPEAKER: Would this property be safe to use for agriculture purposes?

COLONEL ALVORD: Yes. If the disposal material has anything that doesn't meet DEA standards we can't put it there. We have to go with authorized, licensed,

certified disposal site for those kinds of things.

SPEAKER: My next question is are you required to abide by Federal Wetland Regulations?

COLONEL ALVORD: Absolutely. I am the regulator for wetlands in this area.

REPRESENTATIVE FROM THE CORP: We did wetland considerations at both sites and we found the wetland at the lower end of Bunola and it would be the access roads when we take that material up into the hollow. At this time, I believe, that it would acceptable to make temporary fills at a portion of the wet banks and then remove them. Vegetation is one of three criterias that we would use.

SPEAKER: There are not (inaudible) in that hollow?

REPRESENTATIVE: All that I can say s that we had our wetlands manned, I will have to have one of the experts from the district come up and look at it.

COLONEL ALVORD: We cab show you the limits of what we had established that we determine to be the wetlands.

MS KRAUSE: I have one more question. I was told on Friday that you, Colonel Alvord are in charge of this project and that if you choose, you can say okay, all of these people showed up and they gave all of their view points and we are now going to do this instead. Now, I am asking you are you going to do this instead or are

you going to ignore all of our concerns.

COLONEL ALVORD: Do what instead?

MS. KRAUSE: That is up to you, come up with a new plan.

COLONEL ALVORD: Okay. As I preached at the beginning of the session, our proposed plan based on economic analysis was based on Plan 1. At the beginning. Now we are going to go back after this meeting closes and take the record turn it into a transcript and then go back and examine all the concerns, questions and comments that have been raised here tonight. Any of those that we haven't addressed at some time during this we are going to go and see what the impact is. It may generate cost, we changed the economic analysis and then we would be forced into another plan, or it may not.

Now, I can't just go and say that we are going to choose another plan that is more expensive than the one that turns out to be the most economically feasible. Then we are going to look for alternatives to solve the kinds of concerns that were addressed. Obviously there are concerns about the disposal operation so we have got to address that. We have got to look for other alternatives. In the course of just receiving these kinds of concerns, I haven't made any decisions yet

because we haven't looked into sufficient detail all of the concerns and comments that have come up here tonight.

SPEAKER: Are you bound by (inaudible)

COLONEL ALVORD: We are bound to propose the NED, the National Economical Development Plan which is the most economical feasible plan. Given the process that we have to go through.

SPEAKER: For the one that is the highest (inaudible)

COLONEL ALVORD: The highest definition of cost.

SPEAKER: I have another question to regards to Corsin Hollow. If the dam is taken out and the water level goes up, how much would it come up?

COLONEL ALVORD: Between Braddock, five feet, yes.

(question inaudible)

MS. KRAUSE: You keep saying that these are prelimary plans and I have been told by other people that these are the propsed plans and I am also told that November 12 is the end of the citizens comment. If this is preliminary--

COLONEL ALVORD: When I say proposed plan I am talking about the two for three proposal. that doesn't mean that all of the pieces of that plan are locked in.

MS KRAUSE: My question was--there are a lot of people who work for your Army Corp and work for USX and

the barges. Everyone else here, including the boater seems to be in favor of Plan 4 which is to redo Lock 3 with a wider double lock system. You are not listening to that. We are in favor of Plan 4. You keep saying modifying Plan 1, we don't want Plan 1. So, by November 12, we have nothing else to say, yet you are considering that we don't want Plan 1 and you are saying yeah, we can work with Plan 1 up until this point even though we want to know whether you are going to consider Plan 4 before our time runs out.

COLONEL ALVORD: Are we going to consider your concerns for Plan 4, yes. I am going to tell you the truth, if in the course of going over all the concerns and comments that were raised here tonight and it has no significant impact on the economical analysis.

(speaker inaudible)

SPEAKER: Is there anything that the government can do if a property owner does not want to sell?

COLONEL ALVORD: There are procedures that are used in a last resort.

SPEAKER: How soon can we hold a meeting at the fire hall in Bunola?

COLONEL ALVORD: How soon do you want to do it? Talk to Herb White to set up a meeting.

(tape is inaudible and untranscribable.)

C E R T I F I C A T E

I certify that these are the original notes and records recorded by me to the best of my ability of the meeting taken and the proceedings held in the meeting of The Lower Mon River System Study held at: Elizabeth Jr. School on October 22, 1991

Laurel Smay
Official Reporter

ATTACHMENT 6

WRITTEN STATEMENTS
PRESENTED AT PUBLIC MEETING

DINAMO
Three Gateway Center
Pittsburgh, PA 15222
(412) 392-4550

The Association
for the Development
of Inland Navigation in
America's Ohio Valley

October 24, 1991

Colonel Harold Alvord
Pittsburgh District Engineer
U.S. Army Corps of Engineers
Federal Building - 1000 Grant Street
Pittsburgh, PA 15222

Dear Colonel Alvord:

Enclosed is a copy of the comments of James Guttman on behalf of DINAMO at the Lower Monongahela River Navigation System Study public meeting October 22, 1991.

DINAMO strongly supports Plan 1, the "two for three" replacement plan, because it has the highest annual net benefits of any of the plans studied, with minimal environmental and social impacts.

Very truly yours,

R. Barry Palmer

Enclosure

COMMENTS

before

The Pittsburgh District
U.S. Army Corps of Engineers
Public Meeting
Lower Monongahela River Navigation System Study

October 22, 1991, 7:30 P.M.
Elizabeth Forward Jr. High School

presented by

James Guttman, President
Mon River Towing, Inc.

on behalf of

DINAMO
The Association for the Development of
Inland Navigation in America's Ohio Valley

Three Gateway Center
Pittsburgh, Pennsylvania 15222
(412) 392-4550

Colonel Alvord, Ladies and Gentlemen:

I am James Guttman, President of Mon River Towing, Inc., and a member of the Board of Directors of DINAMO, the Association for the Development of Inland Navigation in America's Ohio Valley. Organized in 1981 under the auspices of the Greater Pittsburgh Chamber of Commerce, DINAMO is a regional coalition of business, labor and state government leaders from throughout the Ohio Valley whose singular purpose is to improve the economic climate in the region by urging Congress to expedite modernization of our lock and dam infrastructure.

We appreciate the opportunity this evening to express our strong support of Plan 1 of the U.S. Army Corps of Engineers Feasibility Study on the Lower Monongahela River, which would replace Dam 2 with a gated dam, remove Locks and Dam 3, and replace Locks 4 with twin 84' x 720' locks.

Dam 2 and Locks and Dam 3 are approaching 100 years in age and are in such a serious state of disrepair and structural instability that these facilities may be beyond rehabilitation. Corps of Engineers officials have warned that major components of Dam 2 and Locks and Dam 3 could fail by the fast-approaching turn of the century. Without improvements to this section of the river, commerce could come to a halt -- a devastating blow to the economy of Pittsburgh and western Pennsylvania. A failure of Dam 2 or the loss of the navigation pool created by Locks and Dam 3 could jeopardize the thousands of jobs in this area that depend,

directly or indirectly, on the river system. In addition, the 56 foot wide lock chambers at Locks and Dams 3 and 4 are not compatible with the wider chambers upstream and downstream. This means that tows must re-configure each time they lock through a facility, a time-consuming process that adds millions of dollars each year in delay costs to commodities transitting this portion of the river. Fast-track action is necessary to ensure the continued safe and efficient operation of these structures and to keep western Pennsylvania and the Monongahela River Valley competitive in national and international markets.

The upper Ohio, Monongahela and Allegheny Rivers are crucial to the efficient transport of bulk commodities. In 1989, over 71.2 million tons of commodities transitted the river system in western Pennsylvania. In that same year, over 38.4 million tons of commerce transitted the Monongahela River alone, with a value of nearly $1.5 billion. Of that amount, 87.7 percent, or 33.7 million tons, was coal. A ton of coal can be shipped one mile by barge for less than the cost of a postage stamp. This transportation savings converts into a lower cost of fuel at the power plant and of electricity for businesses, industries and households.

There are 12 power plants in Western Pennsylvania dependent on thousands of tons of coal every day. Coal is also the primary ingredient in coke, which is used in the manufacture of steel. USS's Clairton Works, one of the largest coke

manufacturers in the world, is located on the Monongahela River near Clairton. With its access to low-cost river transportation, it has prevailed as the principal coking source for USS's and USS/Kobe's ironmaking facilities located in Fairfield, AL, Lorain, OH, Fairless, PA, Gary, IN, and Pittsburgh. Clairton processes over 17,000 tons of coal daily, barged in from sources in West Virginia and Pennsylvania. There is no practical method other than river transportation through Locks 2, 3, and 4 from Ohio River and Monongahela River sources for Clairton Works to receive and handle the required coal. Increased costs associated with any other alternative handling method would likely force USS to look to off-shore sources for coke at significantly higher delivered costs.

Other commodities that are fairly common on the river include petroleum, aggregate, chemicals, steel and scrap metal.

DINAMO supports Plan 1 because it has the highest annual economic development benefits of any of the improvement plans studied. Net annual benefits are projected at $230.9 million. The investment in improving this stretch of the river, a distance of nearly 80 miles, is estimated to be $634.5 million in federal cost and $111.2 in non-Federal cost. This would be recovered in annual benefits in slightly over 3 years. In addition, the environmental and social impacts of the tentatively selected plan are minimal.

The Corps of Engineers has looked closely at other

alternatives, including a plan to replace Dam 2 with a fixed crest dam, replace Locks and Dam 3 with new twin 84' x 720' locks, and construct new twin 84' x 720' locks at Locks and Dam 4 for a total project cost of $742.2 million. Net annual benefits of this "three for three" replacement plan are $213.2 million -- comparable to Plan 1, the "two for three" replacement plan. What then are the advantages of Plan 1 over the "three for three" plan? Simply, Plan 1 has a distinct advantage. It likely is the only plan that could obtain funding to address all of the infrastructure needs on the Lower Monongahela River. In the current climate of competition for federal dollars, the Pittsburgh area could probably lobby successfully for funds to replace Dam 2 and Locks and Dam 3. As the Corps of Engineers study reveals, the demands for increased capacity at Locks 4 may not warrant new locks until 2027. Plan 1 would provide a fully modernized river between the Emsworth Locks and Dam at the mouth of the Ohio River and the Maxwell Locks and Dam on the Monongahela River near Brownsville, PA.

In summary, DINAMO believes that Plan 1, including a new gated dam at Locks and Dam 2, the removal of Locks and Dam 3, and new larger locks at Locks and Dam 4 is, in all analyses, the most cost-effective and economically beneficial alternative creating the least environmental and social impacts. We urge the Pittsburgh District to make this alternative its final choice and to expedite procedures in order that construction can begin as

soon as possible. Delays in the movement of vital commodities on the Monongahela River due to the failure to move ahead with improvements to these deteriorated and obsolete structures would seriously diminish this area's full economic vitality.

DINAMO appreciates the opportunity the Corps of Engineers has given us to express our views on the much-needed improvements to Monongahela River Locks and Dams 2, 3, and 4.

Thank You.

Written Statement of
Duquesne Light Company
Regarding the
Lower Monongahela River Navigation System
Draft Feasibility Study, Interim Report
and
Draft Environmental Impact Statement

Submitted at the Public Meeting

held on October 22, 1991

WRITTEN STATEMENT

Introduction

Duquesne Light Company ("DLCO" or the "Company") is pleased to submit this statement at the public meeting on October 22, 1991 regarding the Lower Monongahela River Navigation System Study. In addition to this written statement, the Company also intends to submit during the public notice period detailed comments to the Draft Lower Monongahela River Navigation System Feasibility Study (the "Draft FS") without limitation, including the Draft Environmental Impact Statement (the "Draft EIS"). Attached as exhibits and incorporated by reference are copies of letters which DLCO previously provided to the United States Army Corps of Engineers (the "Corps") on March 22, 1991, April 5, 1991, and September 4, 1991.

1. Although DLCO supports major renovation for Locks and Dams Nos. 2, 3, and 4, it does not support the Selected Plan

The Draft FS and Draft EIS recommend "Plan No. 1" as the National Economic Development plan and the "Selected Plan." Draft FS, p. 6-7. Although DLCO is in favor of renovating Locks and Dams Nos. 2, 3, and 4, it cannot support Plan No. 1 and the Company strongly urges the Corps to reconsider its recommendation.

The Company has not finished its detailed review and analysis of the Draft FS and Draft EIS, but it is clear that the Corps has improperly evaluated several critical issues. For example, the Draft EIS states that the private sector adjustment cost associated with Plan No. 1 is $111.2 million. Draft EIS, p. 2. However, as the Company has repeatedly informed the Corps, the impact of Plan No. 1 on DLCO, alone, is likely to exceed $90 million. This cost has not been factored into the Corps' evaluation. See, Draft FS, p. 5-14.

Another example is the fact that the Draft FS and Draft EIS clearly establish that there are more adverse environmental impacts associated with Plan No. 1 than with any of the other detailed plans. See, e.g., Draft FS, p. 6-3. The Company is uncomfortable with the Corps' proposed resolution of these environmental concerns and believes that the issue merits further study.

Accordingly, the Company finds that it cannot support Plan No. 1.

2. <u>The Corps should focus its attention on a "Three-for-Three" plan</u>

Instead of pursuing Plan No. 1, the Corps should focus its attention on one of the "Three-for-Three" plans which would rebuild Lock and Dam No. 3 in its present location, or in a downstream location. Such a plan would not only satisfy the planning objectives, it also would eliminate many of the

significant public and private sector costs (financial, environmental, and otherwise) associated with Plan No. 1. The Company likely would be in a position to support such a plan, if it were chosen by the Corps.

3. The Chief of Engineers should include DLCO adjustment costs as "federal project costs"

As discussed above, DLCO anticipates that it will incur significant adjustment costs as a result of the Corps' actions. DLCO strenuously disagrees with the Corps' statement that these costs are not "project" costs. See, Draft FS, pp. 5-13 & 5-14. Even if the Corps is correct in its assumption that "[a]ll of the alternative plans . . . will modify the conditions under which the Pennsylvania Department of Environmental Resources issued thermal variances,"[1] it necessarily follows that all of the costs caused by such changes would be "directly or indirectly incurred as a result of the implementation" of the relevant plan. Id. As such, the costs are clearly "project" costs and should be included in the Corps' analysis.

Moreover, given the unique nature of DLCO and the fact that it performs a governmental function, these costs should be designated as "federal project costs" pursuant to

[1]The Company does not agree with the Corps' implied conclusion that a change in "the physical configuration of the navigation structures" would necessarily require reconsideration of the thermal discharge variance. See, Draft FS, p. 5-14. To the contrary, the variance would have to be reconsidered only if the plan resulted in a change to the aquatic population or the thermal discharge. See, 44 Fed. Reg. 32894 (1979). The Company believes that a "Three-for-Three" plan could be implemented such that there would be no adverse impact on either the aquatic population or the thermal discharge.

33 U.S.C. § 633. The Company requests that the Corps reconsider its draft position regarding this issue and include DLCO in Table 7-6 of the Draft FS.

Conclusion

The Company appreciates the opportunity to submit this written statement. Individuals desiring additional information should contact:

John J. Carey
Executive Vice President,
Operations
Duquesne Light Company
One Oxford Centre
301 Grant Street
Pittsburgh, Pennsylvania 15279
(412) 393-6900

Exhibit A

Duquesne Light

One Oxford Centre
301 Grant Street
Pittsburgh, PA 15279

Telephone (412) 393-6000

March 22, 1991

Ms. Jeanine Hoey
U.S. Army Engineers District
Pittsburgh Corps of Engineers
William S. Moorhead Federal Building
1000 Liberty Avenue
ED-DS Jeanine Hoey
Pittsburgh, PA 15222

Dear Ms. Hoey:

Following our meeting (Duquesne Light Company and Pittsburgh District USACE) of March 12, 1991, Duquesne Light has reviewed the potential effects of the placement of L&D No. 3 at r.m. 24.6. With the Duquesne Light Elrama Power Station's discharge at r.m. 25.0, approximately .4 mile up stream of the proposed L&D, the main concern is the thermal effects on the Monongahela River and on the stations cooling efficiencies.

A review of an in-depth Thermal Effects Study completed in 1979 by Ecological Analysts Inc. and our present approved PA DER NPDES discharge permit which includes a "Real Time Load Management Control Strategy" indicates that a dam at r.m. 24.6 would require the station to install cooling towers.

In 1978 Duquesne had an alternative cooling feasibility study prepared by United Engineers. Reviewing this study and updating costs to present day indicates the most feasible installation of station cooling would cost approximately $77,000,000 dollars.

I believe the above information addresses our concern for the placement of L&D No. 3 at r.m. 24.6. If you have any further questions, please call.

Very truly yours,

K. M. Shaffer
General Manager
System Development Unit

KMS:mal

CC: Messrs. J.J. Carey
R.L. Nelson
S.L. Pernick, Jr.

Exhibit B

Duquesne Light
One Oxford Centre
301 Grant Street
Pittsburgh, PA 15279

(412) 393-6000

April 5, 1991

Mr. James A. Purdy
Chief, Environmental Studies Branch
Department of the Army
Pittsburgh District, Corps of Engineers
William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222

Monongahela River Modernization Study of Water Quality
Impacts of Dam Modification Alternatives

Dear Mr. Purdy:

In response to your inquiry dated March 14, 1991 (attached) concerning the modernization of locks/dams nos. 2, 3, and 4 in the lower Monongahela River, we are pleased to have the opportunity to comment on the alternatives under consideration by the Corps. We would also like to express Duquesne's support for this much needed modernization program with its obvious long-term benefits to the region.

As you may know, our Elrama Power Station at Mile Point 25.1 has a once through, non-contact, cooling water system that withdraws up to 535,000,000 gallons per day from the Monongahela River. This entire flow is returned to the River. The once through cooling water is a heated discharge authorized under NPDES permit number PA0001571. Because of the potentially low flows and/or high River temperatures, Duquesne conducted a 316(a) thermal demonstration to address the effects of the thermal discharge on protection and propagation of the indigenous aquatic community during the late 1970s.

After extensive and costly studies and lengthy negotiations with the Pennsylvania Department of Environmental Resources, Duquesne Light developed a Thermal Discharge Control Strategy (TDCS) to monitor and protect the aquatic community under all operating and River conditions. A thermal variance was incorporated into the NPDES Permit on March 17, 1988 (Amendment No. 1). The Elrama TDCS relies on maintaining downstream river

temperature conditions that will continue to maintain growth and survival of the River's indigenous aquatic life under all river temperature and flow conditions. This approach also covers extremely rare river conditions of possible concern, namely low River flow and high ambient River temperature conditions. The TDCS revolves around maintaining portions of the River pool volume (on a percentage basis) at or below aquatic community growth and/or survival temperature limits. These "zones of passage" are maintained by the natural stratification of the heated thermal plume between the discharge and lock and dam number 3. Because of the low Q_{7-10} (approximately 450 to 500 cfs) and the high upstream temperatures that can exist, the "zones of passage" are at critical levels during these adverse conditions. Any modification to the configurations at locks/dams 2 or 3 could have a significant impact on these zones of passage. Therefore, we are very concerned with any significant change to the navigation system at locks/dams 2, 3, or 4.

Our preliminary assessment of the Plans under consideration by the Corps of Engineers, relative to the thermal issue, are discussed below:

Plan 1: This alternative involves the complete removal of Locks and Dam No. 3. This would entail reducing the pool elevation by approximately 3.2' resulting in an increased velocity from the decreased cross-sectional area and reduced stratification. This alternative would exacerbate the already critical thermal conditions that exist particularly under low flow/high temperature River conditions. Preliminary studies indicate that significant load reductions or a cooling tower (estimated cost: $77,000,000*) would likely be required to maintain water quality. In addition to the economic costs associated with a cooling tower are the consumptive losses on the order of 10,000 gallons/minute that would be experienced. This would further reduce the Q_{7-10} of the River.

These impacts do not include the estimated $10,000,000* to $15,000,000 costs associated with other plant modifications from the lowering of the pool. Overall costs associated with this alternative could range to $92,000,000*. Such an impact could seriously affect the future operation of Elrama Power Station.

Plan 4: This alternative would relocate locks/dam No. 3 - 0.8 mile upstream without any change in pool elevation. We are confident that a dam installed at Mile Point 24.6 would seriously affect the thermal stratification and "zones of passage" that permit operation under the TDCS. This relocation would require the Station to install cooling towers or greatly reduce station output. The costs associated with this option are similar to those described in Plan 1. However, other plant modifications related to lowering of the pool would not be required.

*All costs are in 1991 dollars

This scenario is also likely to increase recirculation and move the plume upstream, thereby, increasing the adverse impact on the domestic water supply which already has taste and odor problems due to algae blooms. Please refer to the attachment which discusses the impact of Plan 4 on Duquesne Light.

Other Plans: Two other alternatives that were considered by the Corps involve replacing lock/dam No. 3 at a location 1.6 miles downstream from the existing site and replacing locks/dams 3 at its current location. These are referred to as Plans 2 and 3, respectively. Under either of these scenarios, no adverse thermal impact from the Elrama Power Station is expected. Therefore, these are the alternatives that would minimize thermal effects and have the least impact on the Elrama Power Station.

In summary, the election of either Plans 1 or 4 will cause negative water quality impacts related to the Elrama thermal discharge. Due to these concerns, it is certain that the Elrama thermal issue will be reopened requiring renewed thermal demonstrations (316a) with the prospect of major economic impacts on the Elrama Power Station that could require the installation of cooling towers or impose severe limitations on the operation of the Elrama Power Station. Such restrictions would generally coincide with high system demand since high energy usage and high river temperatures/low flows are likely to be concurrent.

Plans 2 or 3 would minimize water quality impacts and effects on Station operations. We obviously prefer either of these options and hope that our comments will be considered during the selection process.

If you have any questions concerning our response, we would be pleased to discuss them with you and your staff. Please contact Mr. J. K. Cool at 393-6097.

Very truly yours,

S. L. Pernick, Jr.
Manager, Environmental Affairs

*All costs are in 1991 dollars

Attachment

DEPARTMENT OF THE ARMY
PITTSBURGH DISTRICT, CORPS OF ENGINEERS
WILLIAM S. MOORHEAD FEDERAL BUILDING
1000 LIBERTY AVENUE, PITTSBURGH, PA 15222

REPLY TO ATTENTION OF

March 14, 1991

Environmental Studies Branch

Mr. Steve Pernick
Manager, Environmental Affairs
Duquesne Light Company
1 Oxford Center 27-?
301 Grant Street
Pittsburgh, Pennsylvania 15279

Dear Mr. Pernick:

As you know, the Pittsburgh District is studying alternatives for the modernization of the Lower Monongahela River Navigation System, Lock and Dam Nos. 2, 3, and 4 between Braddock and Charleroi. Previously, you supplied us with a cost estimate for adjustment of your facility which would be necessitated by the proposed pool level changes associated with our alternative Plan No. 1. We are also interested in assessing the potential for water quality changes which could occur with Plan No. 1, the tentatively recommended (two-for-three) plan, and Plan No. 4, the best three-for three plan.

Plan No. 1 involves the permanent removal of Locks and Dam No. 3 at Elizabeth (r.m. 23.8) and the consequent adjustment of Pools 2 and 3 to elevation 723.7. The lowering of Pool 3 would reduce the volume of water in the pool, but would not affect the flow. Plan No. 4 would retain Locks and Dam No. 3, but would relocate them 0.8 mile upstream to r.m. 24.6. This would result in a small decrease in the volume of Pool 3, and the physical siting of the structure closer to your facility. Both of these alternatives appear to have the potential to impact water quality parameters of concern to your facility operations.

Our analysis of the potential water quality impacts will be made available for public review in a draft environmental impact statement. This statement will have as an appendix a water quality report on the Lower Monongahela River (draft copy enclosed). As one of the major water users in Pool 3, we request that you review this draft report and comment on our projections for conditions under Plan Nos. 1 and 4. Please bring to our attention your

concerns with both of these alternatives. We would appreciate your written comments by April 5, 1991.

Questions may be addressed to Conrad Weiser at 412-644-6942.

Sincerely,

Robert H Cole for

James A. Purdy
Chief, Environmental Studies Branch

Enclosure (dupe)

Same letter sent to (with Enclosure):

Mr. William M. Kudaroski
Operations Manager - Production
Pennsylvania American Water Company
410 Cooke Lane
Pittsburgh, Pennsylvania 15234

Mr. Larry Myers
Manager, Environmental Control
Allegheny Power Service Corporation
800 Cabin Hill Drive
Greensburg, Pennsylvania 15601

Exhibit C

Duquesne Light Company
One Oxford Centre
301 Grant Street
Pittsburgh, PA 15279

JOHN J. CAREY
Executive Vice President
Operations

September 4, 1991

Lester S. Dixon, Ph.D., P.E.
Chief, Planning Division
Department of the Army
Pittsburgh District
Corps of Engineers
William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222

Re: Proposed Lower Monongahela River

Dear Dr. Dixon:

I am writing to follow up on the telephone conversation yesterday between yourself, myself, and Mr. Peter Skrgic of West Penn Power Company. Specifically, I wish to emphasize that Duquesne Light Company supports the concept of major rehabilitation for Locks and Dams Nos. 2, 3, and 4 on the Monongahela River, but that the Company cannot support the tentatively recommended Plan No. 1.

On August 26, 1991, Duquesne Light Company received a Preliminary Draft Impact Statement on the proposed Lower Monongahela River Navigation Study ("Preliminary EIS"). Although we have not had the opportunity to review the Preliminary EIS in detail, we disagree with a number of the report's conclusions and we do not feel that it adequately evaluates all of the relevant facts. For example, the Preliminary EIS states that the private sector adjustment cost associated with the tentatively recommended Plan No. 1 is $111.7 million. However, as we explained in an April 5, 1991 letter to Mr. James Purdy of the Corps, the impact of Plan No. 1 on Duquesne Light Company, alone, is likely to exceed $90 million.

We feel that rather than pursuing Plan No. 1, the Corps should focus its attention on the "Three-for-Three" Plan that involves rebuilding or rehabilitation of Lock and Dam No. 3 at its present or a downstream location. In this regard, Duquesne Light Company would likely be in a position to support such an alternative.

We appreciate the opportunity for a continuing dialog with the Corps on this issue, and would be pleased to further discuss the feasibility of implementing a Three-for-Three Plan.

Sincerely,

J. J. Carey

EVP0526

ATTACHMENT 7

NEWS ARTICLES
(IN DATE ORDER)

PGH Bus-Times Journal
2-18-91

COMMENTARY

Monongahela lock, dam modernization vital

By R. Barry Palmer

GUEST OPINION

These are difficult times in America. Men and women are at war in the Persian Gulf. The nation is in a recession. And budget deficits are squeezing the resources needed to prepare our economy for the next century — resources necessary to improve our nation's roads, bridges, airports, ports, locks and dams.

These are difficult times, and yet the best of times, for those of us involved in efforts to improve the economy of the Ohio Valley by modernizing the locks and dams on the Ohio River and its navigable tributaries.

Over a decade DINAMO (The Association for Development of Inland Navigation in America's Ohio Valley) has worked with the U.S. Army Corps of Engineers in the Ohio Valley to approve, authorize and fund regional lock and dam modernization objectives. Since DINAMO was organized by the Greater Pittsburgh Chamber of Commerce in 1981 and launched by state government, labor and private sector leadership in the region, four lock and dam replacement projects are under construction, two more are nearing construction funding, and six more are under study. In addition, three projects downstream from Point State Park underwent $100 million in major rehabilitation in the mid-1980s. When completed, these modernization efforts will represent a $4 billion revitalization of our region's waterways.

But these are also difficult times, because the need for these kinds of infrastructure improvements dwarfs the amount of capital available.

Presently 50 percent of the construction cost for replacing a lock and dam comes from a tax on diesel fuel from towboats House and Senate versions of the Water Resources Development Act of 1990, but, in the final bill, the Lower Monongahela River project was eliminated due to budget constraints.

According to Congress's report, the managers of the bill were "extremely disappointed" that the final report didn't include contingent authorization for navigation improvements on the lower Monongahela River.

The report stated: "During public hearings before the House and Senate authorizing committees, witnesses made a persuasive case that the existing navigation structures are in such a serious state of disrepair and structural instability that there is a substantial risk of catastrophic failure in the near future. More than 48,000 jobs in the region are directly dependent on the commerce on this river with thousands more in the coal, utility, steel, chemical and manufacturing industries indirectly related."

The report went on to say that although the committees felt the area's near-emergency conditions warranted contingency behind them and maintaining pools of water for navigation. A lock works in conjunction with a dam by passing traffic from one level of the river to another.

Two locks at L/D 2, built in 1950, are in relatively good shape, but will need major rehabilitation around the year 2020. The dam at L/D 2 is the oldest structure in the Pittsburgh District, built between 1902 and 1906. The wooden supports are rotting and several supports are missing. In addition, strong currents come out of underwater holes, reducing the stability of the structure. It would be dangerous to believe that Dam 2 can continue to function safely in the near future.

Locks at L/D 3 are the most heavily used locks in the Pittsburgh District. Constructed between 1905 and 1907, they are also the oldest locks in the district. The concrete is badly deteriorated, and Corps of Engineers officials say that one or more of the lock walls may fail by the year 2000. The dam at L/D 3 was built in 1907. Divers have observed missing wooden supports, underwater holes and many large cracks and concrete breakouts. Part of the dam is visibly leaning. Another serious concern is the foundation, which may have weakened.

Two locks at L/D 4 were built during 1931 and 1932 and are in need of major improvement. Problem areas are age and concrete condition. Compounding the conditioning problem is the small size of the locks at L/D 4. They are more narrow than projects upstream and downstream, a fact that complicates towing operations. The dam at L/D 4 was built in 1967 and is in relatively good condition.

After studying a variety of alternatives

House OKs Mon River lock, dam design funds

By Harry Stoffer May 30
Post-Gazette Washington Bureau

WASHINGTON — The House yesterday approved a $21.5 billion energy and water appropriations bill for fiscal 1992 that includes $2.3 million to design new Monongahela River locks and dams at Braddock and Elizabeth.

President Bush's budget had recommended $1.4 million for the projects. Western Pennsylvania lawmakers had asked for $3.2 million.

The House voted 392-24 on the bill. Two hundred fifty-two Democrats and 140 Republicans voted yes. Four Democrats, 19 Republicans and 1 independent voted no. All Western Pennsylvania congressmen supported the measure.

The Senate has yet to consider its version of the bill.

Something more than the president's figure is needed to get the Mon projects under construction by 1994, said Barry Palmer, executive director of the Association for the Development of Inland Navigation in America's Ohio Valley, known simply as DINAMO.

Last month, Rep. William Coyne, D-Oakland, reminded House Appropriations Committee members that the U.S. Army Corps of Engineers had forecast that some of the structures could fail by the year 2000.

A failure would jeopardize river transportation, specifically barges carrying coal and other materials to power plants, USX's Clairton coke works and other plants, Western Pennsylvania lawmakers warned.

Design money for the locks and dams is a small part of DINAMO's $4 billion multiyear program to maintain and improve transportation on the Ohio River system, Palmer said from his Pittsburgh office.

Most of the House debate yesterday was on a provision in the bill to make a $434 million installment on the controversial $8.2 billion atom smasher in Texas called the "super collider." The bill also contains money to clean up wastes at nuclear weapons production plants.

Modernized Mon locks, dams sought

By Ken Guggenheim

The Pittsburgh Press

6/18/91

An advocacy group for navigation in the Ohio River valley wants improvements made at two Monongahela locks and dams and the removal of the lock and dam between them.

DINAMO — the Association for the Development of Inland Navigation in America's Ohio Valley — favors building new dams and rehabilitating the locks at Lock and Dam 2 in Braddock; removing Lock and Dam 3 in Elizabeth; and installing new, larger locks at Lock and Dam 4 in Charleroi, Washington County.

Leaders of DINAMO discussed the $635 million project yesterday at a news conference vesterday at the Duquesne Club. Downtown, where its board of directors met.

The group was formed by the Greater Pittsburgh Chamber of Commerce 10 years ago and consists of representatives from business, labor and government from Pennsylvania, Ohio, West Virginia and Kentucky.

DINAMO leaders and Col. Harold Alvord, commander of the Army Corps of Engineers Pittsburgh district, said the three Mon locks and dams are antiquated, unsafe and unable to meet the demands or river commerce.

The dam at Lock and Dam 2, built from 1902-06, is missing some of its wooden supports and other supports are rotting. Strong currents come out of underwater holes.

The concrete on the locks at Lock and Dam 3, built from 1905-07, has deteriorated and is in danger of sliding or tumbling into the river.

The locks at Lock and Dam 4, built from 1931-32 also need repairs. These locks are so narrow that only a few barges can be locked at a time. This causes delays in river traffic, increasing shipping costs and ultimately raising prices for consumers.

"We're trying to put Pittsburgh and Western Pennsylvania in the 21st century," said R. Barry Palmer, DINAMO's executive director.

River transport is a vital part of the regional economy, Palmer said. Without lock and dam improvements, "we're going to lose what we have," he said.

DINAMO Chairman Neil N. Diehl expressed confidence that federal money would be available for the project.

Pittsburgh Press Sept. 27, 1991

Project for Mon planned

$735 million for locks, dams

By Ralph Haurwitz

The Pittsburgh Press

The U.S. Army Corps of Engineers has proposed a $735 million project to improve the century-old system of locks and dams on the Monongahela River in Allegheny and Washington counties.

An interim report by the corps recommends replacing the dam at Braddock, eliminating the locks and dam at Elizabeth and building new, larger locks at Charleroi, Washington County.

The plan would require raising numerous commercial and recreation docks, sewers and water intakes because the water level would rise about three feet in a portion of the river. Without adjustments, those facilities would be flooded. Also, the Conrail bridge across the river at North Braddock would have to be rebuilt to provide additional clearance.

Although the corps plans to seek congressional funding for relocating 31 publicly owned facilities, such as sewers and water intakes, owners of private shoreside developments would have to bear their own adjustment costs.

The corps estimates the private work at $111 million. The $735 million total cost includes that figure.

Removal of Locks and Dam 3 at Elizabeth will have harmful effects on the environment, the study says.

The flow downstream from a dam, called tail water, provides excellent fish habitat. Another problem is that extensive dredging, which disturbs fish and other aquatic life, will have to be done to provide a nine-foot depth for navigation.

Because of this, the U.S. Fish and Wildlife Service has expressed opposition to the corps' plan. However, the corps intends to compensate, in part, for the environmental damage by installing underwater rock piles to improve fish habitat, said John Reed, a spokesman for the corps' Pittsburgh District.

The report says lock and dam improvements are desperately needed because the huge concrete and steel structures have deteriorated with age. A failure of major components could halt river transportation or reduce water levels sharply in a portion of the river.

In addition, some of the locks are smaller than the industry standard, causing river-traffic bottlenecks.

The navigation structures are important to the region's economy, particularly for the transport of coal from mines in northern West Virginia and southwestern Pennsylvania to power plants in the Ohio Valley.

The dams break up the river into a series of pools of relatively constant depth. The locks function as liquid elevators, allowing vessels to move from one pool to another.

The corps is seeking public comments on its proposal and has scheduled a meeting for 7:30 p.m. Oct. 22 at Elizabeth Forward Junior High School in Elizabeth Township. A final report will be issued later this year, said Reed.

The plan also calls for the government to buy out 14 private homes in the Lincoln and Forward areas. The corps wants to use those parcels to dispose of material dredged from the river.

(Ralph Haurwitz is The Pittsburgh Press environmental writer.)

Higher cost seen for lock, dam plan

By Johnna A. Pro 9-28-91
Post-Gazette Staff Writer

A plan by the Army Corps of Engineers to upgrade the lock-and-dam system on the Monongahela River will cost $251 million more than planners estimated last year when they began considering the proposal.

The corps will begin seeking public comment on the $735 million proposal at workshops and hearings next month.

The plan, which initially carried a $484 million price tag, calls for removing Lock 3 in Elizabeth, modernizing Lock 2 in Braddock and replacing Lock 4 in North Charleroi.

"If everything were to run smoothly, we're looking at construction around the turn of the century," corps spokesman John Reed said.

At Lock 2 in Braddock, the fixed-crest dam would be replaced by a gated dam that regulates water flow. The gated dam will raise the level of the river, thus eliminating the need for a lock in Elizabeth, Reed said.

At Lock 4 in North Charleroi, the two existing lock chambers would be replaced by twin chambers 84 feet wide by 120 feet long.

Reed said cost estimates made public last September were based on preliminary engineering information.

"At that point we hadn't identified the disposal sites and didn't know what properties we would have to buy," he said.

If the project receives congressional approval, the corps will take over 11 houses in Bunola, a section of Forward, and in Coursin Hill, which is across the river from Clairton.

Reed said the corps would have to buy the houses because they are in areas where mud and dirt would be disposited during the construction.

Workshops will be held from 2 to 4 p.m. and 7 to 9 p.m. Oct. 18 at the Monongahela Fire Hall and from 2 to 4 p.m. and 7 to 9 p.m. Oct. 21 in Room 117 of the Penn State McKeesport Campus conference center.

A public hearing will be held at 7:30 p.m. Oct. 22 in Elizabeth Forward Junior High School.

Army Corps' proposal for locks, dam expected to lower Mon, raise water bills

Pgh. Press 6 Oct.

By Ralph Haurwitz

The Pittsburgh Press

A proposal by the Army Corps of Engineers to permanently remove the locks and dam at Elizabeth on the Monongahela River could result in higher water bills for customers of the Pennsylvania-American Water Co.

That's just one of the ramifications of the corps' $735 million plan to improve navigation on the lower Mon.

Besides eliminating Locks and Dam 3 at Elizabeth, the corps wants to replace the dam at Braddock and construct larger locks at Charleroi, Washington County. The agency says the improvements are needed because of the poor condition of the locks and dams, some of which are nearly a century old.

The plan, which needs congressional approval to go forward, has evoked support, opposition and concern among various river interests. The proposal would benefit some river users but cause problems for others.

The removal of the locks and dam at Elizabeth would raise the water level by 5 feet downriver and lower it 3.2 feet upriver, said Les Dixon, chief of planning for the corps. Flooding would not increase because the new dam at Braddock would have gates to control flow more precisely.

Many sewers, water intakes, docks and other shoreside facilities would have to be raised or lowered to accommodate the new water levels. The corps plans to seek congressional funding for the $63 million cost of rebuilding publicly owned facilities. But privately owned properties would have to bear expenses of $111 million.

Pennsylvania-American, which serves 750,000 people in the South Hills and Washington County, would have to install a new, lower water intake for its treatment plant at Elrama, Washington County. The utility is privately owned and would have to bear the $5 million cost itself.

"We're not opposed to the project at all," said Richard Neubauer, Pittsburgh division manager for the water company. "You can see why we're a little concerned. Obviously, if we have to spend $5 million, that cost gets passed on to our customers in the form of higher rates."

The 3.2-foot drop in river level would also increase the potential for accelerated algae growth, he said. The algae could cause taste and odor problems in the water, as well as increase the cost of chemical treatment to control such problems.

Customers of Duquesne Light Co. and West Penn Power Co. also could face higher bills.

The corps' study estimates that Duquesne Light and West Penn Power would have to spend $15 million each to lower water intakes at their Elrama and Mitchell power stations, respectively.

Kenneth Service, director of corporate communications for Duquesne Light, said the company might have to construct cooling towers or reduce power generation to avoid raising the temperature of the river.

This is because the power plants release warm water, and the reduced volume of water in the river could result in excessive "thermal" pollution, which is prohibited by environmental laws designed to protect fish and other river life.

The state Department of Environmental Resources opposes the corps' recommendation and prefers an option the corps examined but rejected. The DER wants the corps to enlarge the locks at Elizabeth rather than remove them.

The reason, said Joseph Chnupa, the DER's assistant regional director, is that the new water levels resulting from elimination of the Elizabeth locks and dam would alter ground-water levels near the river. That, in turn, would interfere with ground-water cleanup projects under way at the USX Clairton Works and the Ashland Oil Inc. terminal in Jefferson, he said.

Commercial transportation interests support the corps' plan. The Association for the Development of Inland Navigation in America's Ohio Valley — known as Dinamo — says the project would address crumbling locks and dams and provide a badly needed boost to the region's economy. It has been lobbying Congress for funding.

Barge operators, who haul mainly coal, say the elimination of the Elizabeth locks, coupled with larger locks at Charleroi, would remove bottlenecks and improve efficiency.

USX Corp. is another proponent. Coal barges from the Maple Creek Mine in New Eagle, Washington County, would no longer have to pass through a lock on the way to the company's coke works at Clairton, said Ernie Glenn, a spokesman.

Evan Ford, owner of the 240-space Evan Ford Marina in Forward, likes the plan, too. "It's a boating plus," he said, explaining that the removal of the Elizabeth locks and dam would give recreational boaters a 30-mile stretch — from Braddock to Charleroi — to ply without the inconvenience of passing through a lock.

Municipalities with sewers and water lines that would have to be raised or lowered are still examining the corps' proposal. Dennis Pittman, community development director for McKeesport, said he's not sure how the proposal might affect redevelopment plans along the river.

However, it would require replacement of three McKeesport storm sewers that would be flooded by the higher water. The corps estimates the cost at $4.1 million.

McKeesport, with a total annual budget of $10 million, could not afford that expense, Pittman said. The corps says it will seek congressional funding to cover the costs of adjusting such publicly owned facilities.

In light of the corps' assurances, most municipalities are supporting the plan, said Raymond Reaves, county planning director. The county also supports the plan.

(Ralph Haurwitz is The Pittsburgh Press environmental writer.)

PGH. BUSINESS-TIMES
JOURNAL
PITTSBURGH, PA

Immediate action needed to keep Monongahela River navigable

By R. Barry Palmer

INSIDER'S VIEW

The Monongahela River has been an economic generator for southwestern Pennsylvania for hundreds of years, providing an inexpensive means of transporting bulk commodities such as coal, steel, petroleum, grain and more.

Nine lock and dam facilities, constructed between 1903 and 1967, provide year-round navigation on the river to ensure the continued economic vitality of the Monongahela River Valley. But years of wear have rendered five of these structures a hazard to safety and a threat to reliable operation.

The need for expeditious action on the lower Monongahela River is undisputed, and a consensus is building at the highest level of the U.S. Corps of Engineers that improvements to the lower Monongahela River be given the highest priority. Dinamo, the association for Development of Inland Navigation in America's Ohio Valley, worked very closely with the late Sen. John Heinz, and is working closely with Western Pennsylvania congressmen and senators to keep this project uppermost on the legislative agenda.

After an intense lobbying effort in 1990 by Dinamo, contingent construction authorization, subject to a final report of the chief of engineers, was included in both the Senate and House versions of the Water Resources Development Act of 1990. However, due to budget constraints, the project was eliminated from the final version. Language in the conference report of the Water Resources Development Act of 1990 indicated that the Monongahela River project has acceptance for congressional approval in the 1992 Authorization Bill. The managers of the conference report were "extremely disappointed that the final conference report [did] not include contingent authorization for navigation improvements on the lower Monongahela River Locks and Dams 2, 3, and 4." The report directed that the Corps of Engineers complete a feasibility study and final report of the chief of engineers "with all sense of urgency" so that Congress could authorize the improvements during the next legislative session.

Dinamo is urging the Corps of Engineers to expedite the study of these sorely needed improvements on the lower Monongahela River. The district engineer completed the draft feasibility report in September. After a favorable public review process, the district engineer's report will be sent to Washington for approval from the chief of engineers. With this final report, construction authorization could be attained in 1992.

Specifically, improvements are being sought for the three worn facilities on the lower Monongahela River near Pittsburgh, Locks and Dams 2, 3, and 4. A plan to modernize this portion of the river has been developed by the Pittsburgh district of the Corps of Engineers.

Locks and Dams 2, 3, and 4 are nearly 100 years old, and are in such a serious state of disrepair and structural instability that there is a substantial risk of failure in the near future. Corps of Engineers officials have warned that components of Dam 2 and Locks and Dam 3 could fail by the fast-approaching turn of the century.

Fast-track action is necessary to ensure the continued safe and efficient operation of these structures and to keep the Monongahela River Valley competitive in regional, national and international markets.

The Corps of Engineers tentatively have selected a modernization plan that would replace Dam 2 with a new gated dam, remove Locks and Dam 3, and construct new, twin locks at Locks and Dam 4. The Pittsburgh district will hold a public meeting on the lower Monongahela River navigation system study on Oct. 22 at 7:30 in the Elizabeth Forward Junior High School, McKeesport. This is an opportunity for interested persons to learn more about the study and review the district engineer's report.

At the public meeting, Dinamo strongly will recommend that the Pittsburgh district engineer finalize his tentative selection of the plan, the so-called "two-for-three" replacement plan. This plan has the highest annual economic benefits of any of the improvement plans studied.

In addition, the environmental and social impacts of this plan are minimal. With Congressional construction approval in 1992, the new facilities could be operational in 2002. The project is estimated to cost $623.5 million, with an additional $111.2 million in non-federal cost for projected adjustments in the pool level, for a total project cost of $734.7 million. Net benefits of the project would be $230.9 million annually.

What are the additional advantages of this plan over others? It likely is the only plan that could obtain funding to address all of the infrastructure needs on the lower Monongahela River. In the current climate of competition for federal dollars, the Pittsburgh area probably could lobby successfully for funds to replace Dam 2 and Locks and Dam 3. As the Corps of Engineers study reveals, the demands for increased capacity at Locks 4 may not warrant new locks until 2027. In addition, the favored plan would provide a fully modernized river between the Emsworth Locks and Dam at the mouth of the Ohio River and the Maxwell Locks and Dam on the Monongahela River near Brownsville.

The plan also has received wide support from many businesses in the affected areas because of the perceived regional and local benefits for improving the system. A failure of Dam 2 or the loss of the navigation pool created by Locks and Dam 3 could jeopardize thousands of jobs in this area that depend, directly or indirectly, on the river system.

R. Barry Palmer is executive director of Dinamo, the association for Development of Inland Navigation in America's Ohio Valley, a coalition of leaders from business, industry, labor and state government.

Mon Valley residents

By Ralph Haurwitz

The Pittsburgh Press
10-24-91

Some residents of the Monongahela Valley say they will fight — to the U.S. Supreme Court, if necessary — a proposal by the Army Corps of Engineers to dispose of 1.5 million cubic yards of river dirt in two rural communities.

The disposal plan is part of a broader proposal to rebuild the dilapidated and undersized locks and dams on the lower Monongahela River.

The $735 million project drew praise from the coal, steel and barge industries at a public meeting last night at Elizabeth Forward Junior High School in Elizabeth Township.

But the corps, which sponsored the meeting to obtain public comment, received sharp criticism from residents of the Bunola section of Forward and the Coursin Hollow section of Lincoln, which are being considered as disposal sites. About 14 households would be relocated or otherwise affected.

Lincoln's mayor, Florence Swantack, and council members complained that they weren't even notified about the proposal — an oversight for which corps officials apologized.

"We will fight all the way to Washington, D.C., to the Supreme Court. If it takes civil disobedience, that's what you'll get," said Judy Krauss, who grew up in Bunola.

vow to fight lock plan

Col. Harold Alvord, the corps' district engineer, said he welcomed suggestions for alternative disposal sites for material to be dredged from the river.

So far, he said, tests have not shown the soil and sediments to be contaminated with hazardous materials. Any such contamination would not be placed at the Bunola or Coursin sites, he said.

Disposal of the river dirt requires a sizable parcel of land. The 1.5 million cubic yards would cover an area 1 mile by 1 mile to a depth of about 18 inches. Some Lincoln officials said they believe suitable uninhabited land could be found.

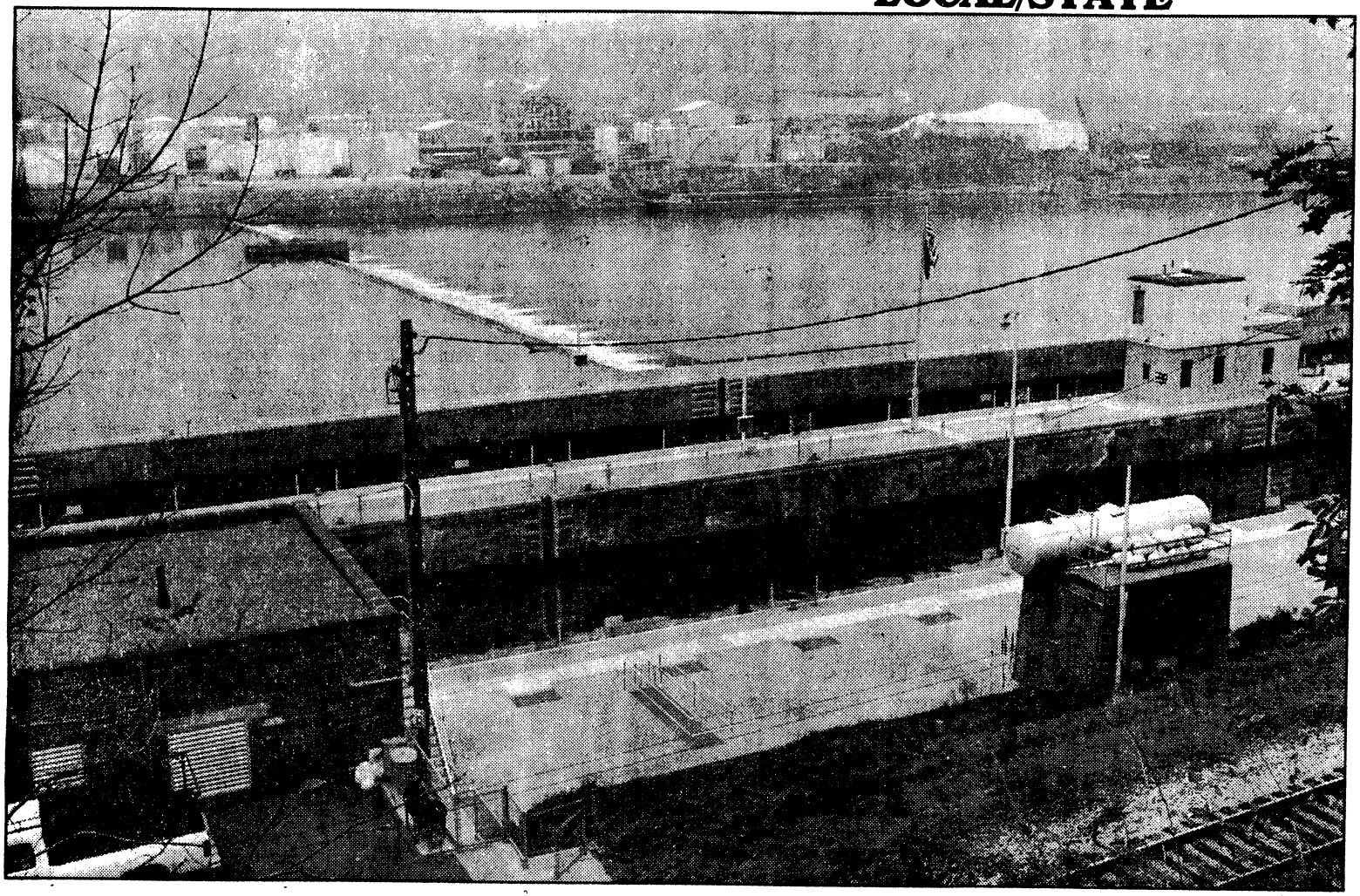
Dorothy Fulmer, who lives near the proposed disposal site in Lincoln, complained that corps officials worked closely with industry executives to develop the navigation-improvement plan, but ignored the small communities that would be affected.

Lester Dixon, a civil and environmental engineer for the corps, apologized for the agency's failure to meet with homeowners and promised to take corrective action.

Representatives of the Waterways Association of Pittsburgh and other industry groups applauded the corps' proposal.

The improvements would also benefit recreational boaters, said Richard Ehringer, past president of the association.

(Ralph Haurwitz is The Pittsburgh Press environmental writer.)



John Heller/The Pittsburgh Press

Lock and Dam 3 on the Mon at Elizabeth faces closing under one Corps of Engineers option

Corps of Engineers outlines plans for river improvements

By CHRISTINE ENZERRA
Herald-Standard Staff Writer
10-24-91

ELIZABETH — If you know of a large parcel of land along the Monongahela River between Charleroi and Braddock in need of fill dirt, the U.S. Army Corps of Engineers would like to hear from you.

The Army Corps on Tuesday outlined its plans for renovating, repairing or replacing the locks and dams at Charleroi, Elizabeth and Braddock at a public meeting at the Elizabeth Forward Junior High School.

A major concern raised by residents at the meeting involved the proposed dumping sites for the material to be dredged from the river during the project.

Two sites totaling 347 acres are under consideration — 229 acres in the village of Bunola in Forward Township and 119 acres in the Coursen Hill area of Lincoln Borough. The Army Corps anticipates dredging some 1.5 million cubic yards of soil and gravel from the Mon River, which would place 30 to 50 feet of material at each site.

About 14 homes would be taken for the landfill portion of the project. Judy Krauss has two uncles who would lose their homes in Bunola. She suggested the Army Corps find an alternative to the dumping.

"There are a lot of people looking for landfill all along the river, all along the Monongahela, the Ohio and even the Mississippi," Krauss said. "You could sell it and even make some of

(See CORPS on Page A-2)

Corps of Engineers reveals river plans

(Continued from Page A-1)

your money back. The man from DINAMO says it's cheap to move things on the river."

Krauss was referring to testimony given earlier in the hearing by James Gutman, president of Mon River Towing, Inc. of Belle Vernon, and a representative of DINAMO, a group dedicated to developing inland navigation in the Ohio River valley.

Gutman said that it is actually cheaper to to move a ton of material a mile on the river by barge than it is to mail a letter.

The Army Corps is planning to replace the fixed-crest dam at Braddock with a gated dam, remove the lock and dam at Elizabeth entirely, and replace the old lock chamber at Chaleroi with two new lock chambers, each 84 by 720 feet.

That plan would cost the federal government $623.5 million, with an additional $111.2 million born by the private sector for changes which would need to be made due to changing water levels.

The dams at both Braddock and Elizabeth are more than 80 years old, as is the lock at Elizabeth.

According to Col. Harold Alvord, the district engineer for the Pittsburgh District of the Army Corps, both dams are beginning to deteriorate.

The locks at Elizabeth are also 84 years old, and like the Charleroi locks, only 56 feet wide.

"We looked at 40 different possible options to repairing these structures, or replacing them," Alvord said.

It all boiled down to three plans — replacing three locks and dams with two locks and dams, replacing the three facilities with three new facilities, with a slight change in the location of the Elizabeth facility, or making no major changes in the structures except for repair and renovation work.

According to Alvord, the first plan has the lowest cost with the highest potential financial benefit.

Alvord said Plan 1 would result in annual benefits of $304.5 million, or a net benefit of $230.9 for the project.

"Those benefits would be in reduced costs to two companies moving coal up and down the river and offshoot benefits such as reduced energy costs which would be passed on to consumers," Alvord said.

"We fully support Plan 1 to revitalize the Mid Mon Valley and the Lower Mon Valley," Gutman said. "These structures are not going to last much longer and if one should fail, it would have a devastating effect on all of us in the Mon Valley."

Gutman noted that in 1989, 38 million-tons of material was shipped on the Mon River.

"We don't want to do anything to jeopardize the edge we have over the other areas of the country that are landlocked and don't have the advantages we have with our three rivers," Gutman said.

"The real advantage with Plan 1, with only two projects to build, there is less maintenance for the taxpayers when they are built and less delays and lower costs to the consumer for vessels to lock through," he added.

Eliminating the lock and dam at Elizabeth, however, will change the water levels.

Between Elizabeth and Braddock, the river is expected to be raised five feet. Between Elizabeth and Charleroi, it would drop about three feet.

It is because of those changes that extensive dredging will be needed.

It will also mean changes in water and sewer systems and industrial uses of the river.

The federal government will pay for any changes to municipal systems, but private firms will be on their own. One company which will be affected is Pennsylvania-American Water Co., which services 750,000 customers in the region, with two intakes and two treatment plants on the Mon River.

One of those plants is within the Charleroi pool, which would drop three feet.

"We're doing a study as to what effect that will have on our intake. We may have to put in a new pump," said Bill Kudaroski, Penn-American's operation manager for production.

Kudaroski said replacing the pumping system could cost about $5 million, a cost which would be passed on to the consumers.

"The other thing we are very concerned about is the thermal pollution that may occur with this water level drop," Kudaroski said. "Duquesne Light operates a plant right next to our intake and West Penn Power's Mitchell Power Station is about three miles upstream.

"(The thermal pollution) will cause additional algae growth in the river and that could cause a taste and odor problem," he said.

Chemical treatment for an algae problem could cost the water company an extra $500,000 per year, Kudaroski said.

The plan would replace the Elizabeth lock and dam would not have as much impact on his company, Kudaroski said.

Alvord said he would look at the concerns raised by the public to see if they can be remedied or if they raise the cost of the project enough to make it more feasible to consider another alternative.

Public input will continue to be taken until Nov. 12, with the final feasibility report due by Dec. 1.

The division engineer is to approve or disapprove that plan by Dec. 16, with preconstruction engineering and design to start immediately thereafter.

That phase of the project should take three to five years.

No construction would begin until 1996. Completion is expected by 2022.

Alvord noted that the entire plan is subject to revision at any stage.

"If we find a way to reduce costs, do something better or to have less of an impact on the population that lives in the area, we will do that," Alvord said.

LOWER MONONGAHELA RIVER
NAVIGATION SYSTEM STUDY

APPENDIX

FISH AND WILDLIFE RESOURCES

U.S. Army Engineering District, Pittsburgh
Corps of Engineers
Pittsburgh, Pennsylvania

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Suite 322
315 South Allen Street
State College, Pennsylvania 16801

November 15, 1989

Mr. John M. Miklaucic
Planning Division
Pittsburgh District
U.S. Army Corps of Engineers
Federal Building, 1000 Liberty Ave
Pittsburgh, Pa 15222

Dear Mr. Miklaucic:

This responds to your November 2, 1989, letter requesting information about potential impacts to endangered species in the area that may be affected by the Lower Monongahela River Navigation Project.

Although there have been no recent collections of endangered mollusks from the Ohio River, the following three federally listed species have historically occurred in the upper Ohio River: orange footed pearly mussel (Plethobasus cooperianus), pink mucket pearly mussel (Lampsilis orbiculata), and rough pigtoe (Pleurobema plenum).

Dr. David Stansbery from Ohio State University has informed us that since their listing in the June 1976 Federal Register, Plethobasus cooperianus has been renamed Plethobasus striatus and Lampsilis orbiculata has been renamed Lampsilis abrupta. These species may have been extirpated or remnant populations may exist in the Upper Ohio or its tributaries or they may have reinvaded their former range along with the game fish species that are once again common in the upper river.

Significant changes have taken place in the river since these mollusks were last collected. Water quality, seriously degraded in the past, has improved as a result of water pollution controls and changing economic conditions. Therefore, conditions for mussels have improved. We have no information on the presence of endangered mussels within the project area.

Except for the above species, no federally listed or proposed threatened or endangered species under our jurisdiction are known to exist in the project impact area. Therefore, no Biological Assessment or further Section 7 consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) is required with the Fish and Wildlife Service. Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered. A compilation of federally listed endangered and threatened species in Pennsylvania is enclosed for your information. Requests for information regarding State-listed endangered or threatened species should be directed to the Pennsylvania Game Commission (wildlife), the Pennsylvania Fish Commission (fish, reptiles and amphibians) and the Pennsylvania Department of Environmental Resources (plants).

If you have any further questions, please contact Phil Edmunds of this office at 814-234-4090.

Sincerely,

Edward W. Perry
Acting Supervisor

Final Fish and Wildlife Coordination Act Report Assessing Impacts of Proposed Modifications to Locks and Dams 2, 3 and 4, Lower Monongahela River Navigation Project, Allegheny, Westmoreland and Washington Counties, Pennsylvania (Revised July 1991)

Final Fish and Wildlife Coordination Act Report
Assessing Impacts of Proposed Modifications to Locks and Dams 2, 3 and 4, Lower Monongahela River Navigation Project, Allegheny, Westmoreland and Washington Counties, Pennsylvania
(Revised July 1991)

Prepared for:

U.S. Army Corps of Engineers
Pittsburgh District
Pittsburgh, Pennsylvania 15222

Prepared by:

U.S. Department of the Interior
Fish and Wildlife Service
State College, Pennsylvania 16801

Preparers: David J. Putnam,
Richard W. McCoy and
Francis R. Plewa
Project Leader: Charles J. Kulp

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Suite 322
315 South Allen Street
State College, Pennsylvania 16801

July 18, 1991

Colonel Harold F. Alvord:
District Engineer, Pittsburgh, District
U.S. Army Corps of Engineers
Federal Building, 1000 Liberty Avenue
Pittsburgh, PA 15222

Dear Colonel Alvord:

This supercedes the Final Fish and Wildlife Coordination Act Report Assessing Impacts of Proposed Modifications to Locks and Dams 2,3, and 4, Lower Monongahela River Navigation Project, sent to you on April 8, 1991. Since that date, refinements in estimates of project excavation requirements have changed. Also, the availability of new river mapping and soundings data have resulted in changes in estimates of shallow water habitats. Overall, Plan 1 would result in a net gain of 76.5 acres of shallow water habitat with the new project alternatives.

Accordingly, we have revised the report for inclusion into your final feasibility report. I have discussed these changes with representatives of the Pennsylvania Fish and Game Commissions, and they concur with the recommendations in this report.

Sincerely,

Charles J. Kulp
Supervisor

Table of Contents

List of Tables

Introduction

This report is based upon information taken from the earlier reports cited below, project plans and information provided by the Pittsburgh District, U.S. Army Corps of Engineers, and recent studies conducted by or under contract to the Service. Technical assistance and information was also provided by the Ohio River Sanitation Commission and the Pennsylvania Fish Commission.

The study was authorized by a Senate Resolution of May 16, 1955, entitled Monongahela-Youghiogheny River Basin Study. Additional authorization for investigation of the Monongahela River Navigation System was included in a resolution adopted by the House of Representatives Committee on Public Works and Transportation on September 23, 1976.

The Service developed several planning aid reports (PAR) on fish and wildlife resources relative to the various navigation project proposals during the last decade. The June 1979 report contained general descriptions of fish and wildlife resources, statements of concern and recommended studies. The December 1982 planning aid report addressed fish and wildlife resources in the Monongahela River from the Maxwell Lock and Dam upstream to the Pennsylvania/West Virginia border. In November 1983, the Service submitted the final Fish and Wildlife Coordination Act Report Section 2(b) on the effects of navigation modifications in the Monongahela River in the vicinity of Locks and Dams 7 and 8. In June 1984, we prepared a report on fish and wildlife resources in the lower Monongahela River from RM 61.2 to its confluence with the Allegheny River at Pittsburgh. Additional information on the lower Monongahela River was provided in a second planning aid report dated October 1985.

The 7,384 square mile Monongahela River basin drains portions of Pennsylvania, West Virginia and Maryland. The Monongahela River is formed by the confluence of the West Fork and Tygart Rivers in West Virginia. The Cheat and Youghiogheny Rivers are two major tributaries. The Monongahela River Navigation System includes the navigation pool of Emsworth Locks and Dams on the Ohio River, six locks and dams in Pennsylvania and three additional locks and dams in West Virginia. The lower Monongahela River is heavily developed with large water-based industrial plants and extensive urban lands. A narrow band of riparian forest persists along the water's edge even in heavily developed sections. Numerous concrete walls, barge docks and slag piles line the lower 20 miles of the river. In the upper 22 miles of the study area, development is primarily restricted by topography to either the right or left bank with the opposite bank forested. The riparian areas are vegetated primarily with red maple, silver maple, willow and sycamore. Because of the steep topography, large expanses of emergent hydrophytes are not generally found in or along the Pennsylvania reach of the Monongahela River, although scattered patches of submerged hydrophytes are found in shallow water areas. Small emergent wetlands occur along some tributaries and in a narrow band along some of the pool 3 Shoreline.

Description of Project Plans

Three alternative plans for the lower Monongahela River Navigation System were carried through the Pittsburgh District's final feasibility study phase.

Without-Project Alternative

The "Without-Project" Alternative is the most likely condition expected to exist in the future in the absence of a new navigation project or any change in public law or policy. In this instance, it is the most probable course of action to rehabilitate the existing Locks and Dam Nos. 2, 3 and 4. It includes a new fixed crest dam and lock rehabilitation at Locks and Dam No. 2 by year 2022, replacing Locks and Dam No. 3 in-kind, rehabilitating Locks 4 by Year 2002 and replacing them in-kind by Year 2027. All work would be done at existing locations. No pool level changes or navigation channel dredging would be necessary. Excavation for replacement structures and approach improvement upstream of Locks and Dam No. 3 would total about 2,605,000 cubic yards.

Plan 1 (Tentatively Recommended Plan) This alternative consists of construction of a new gated dam and lock rehabilitation at existing Locks and Dam No. 2, and new twin 84-foot by 720-foot lock chambers to replace the

existing chambers at Locks and Dam No. 4. The existing Locks and Dam No. 3 would be eliminated. Dam No. 2 would be raised 5 feet and the water level in Pool 3 would be lowered 3.2 feet from R.M. 23.8 to R.M. 41.5. Restoring a nine-foot navigation channel in Pool 3 and improving lock approaches would require the dredging of an estimated 2,432,000 cubic yards of bottom materials. Site excavation would require removal of an additional 841,110 cubic yards of material.

Plan 4 The existing Dam No. 2 would be replaced at the present site with a new fixed crest dam and the locks would be rehabilitated. Existing Locks and Dam No. 3 would be replaced by a new fixed crest dam and new twin 84 by 720-foot locks at RM 24.6. The pool between RM 24.6 and the existing Locks and Dam No. 3 (RM 23.8) would be lowered 8.2 feet to the level of Pool 2. The locks at existing Locks and Dam No. 4 would be replaced by new twin 84-foot by 720-foot locks. Dredging of 344,450 cubic yards of river bottom between RM 23.8 and 24.6 and at the approach to locks 4 would be necessary to restore a nine-foot navigation channel. Excavation to accommodate the new locks, dams and abutments is estimated at 3,523,680 cubic yards.

Fish and Wildlife Resources

Without-Project

Aquatic Resources

Based on lock surveys and recent sampling results, the fishery appears to be improving in the lower Monongahela River. The future of this fishery depends upon improved water quality in the river and its tributaries and availability of suitable habitat. Sampling results indicate that many fish species are increasing in abundance where gravel and rocky substrates exist. Abundance and diversity are lower in areas where silt and mud bottoms predominate.

The ORSANCO's lock chamber monitoring effort from 1967 to 1988 resulted in the collection of 34 species of fish and 1 hybrid from Lock 2 (R.M. 11.2) and 31 species and 3 hybrids from the Maxwell Lock (R.M. 61.2). Due to funding and manpower constraints, fish collections were not made in 1969, 1971, 1972, 1974, 1975, 1979, 1982-84 and 1986. Although the abundance of species in the yearly catch varied significantly due to problems associated with sampling, it is important to note the steady increase in diversity over the past 20 years (Table 1). The physical habitat has not changed substantially but improved water quality has allowed many species to return to the river.

Further upstream, Ecological Analysts, Inc., sampled fish in a 9.5-mile reach of the Monongahela (RM 22.0 to 31.5) from April 1977 through July 1978. Fifty species plus 4 hybrids were collected during this period.

During 1981 and 1982, the NUS Corporation conducted a study at West Penn Power Company's Mitchell Power Station (RM 29.4). Approximately 415 fish were collected, comprised of 16 different species. The catch was dominated by gizzard shad, freshwater drum, emerald shiner, channel catfish, bluegill and white crappie. These species accounted for 28.4, 22.4, 16.1, 11.1, 9.9 and 5.5 percent of the total sample, respectively, by number.

During the spring of 1984 and 1985, the Service sampled the lower four pools (R.M. 0.0 - 61.2) in the Monongahela River and published the results in an October 1985 PAR. A limited sampling effort was again completed with 2 1/2-inch mesh gill nets and minnow seines in September 1988 (Tables 2 and 3). When comparing the 1984-85 and 1988 sample results, there is a significant difference in the catch per hour with the same gear. For example, 37 sets in 1984-85 with 2 1/2-inch gill nets produced 18 species, 533 fishes in 802 hours of fishing. In 1988, the same nets set 13 times collected 784 fish (20 species) in only 215.5 hours fished. The catch per hour was only 0.7 in 1984-85 but increased to 3.6 in 1988. The most abundant species in the 1988 sample (similar to 1984-85) was channel catfish which comprised 47 percent of the catch followed by carp (10 percent), walleye (9 percent), and spotted bass (8 percent). There were only 20 species collected in the 1988 samples compared to 38 species from all types of gear in 1984-85 largely due to fewer samples

and sampling gear employed in 1988. The 1984-85 study found significant increases in abundance and species diversity, especially in the lower two pools. This trend seems to be continuing based upon the 1988 results.

The size distribution and length/weight measurements (Table 4) indicate healthy populations of channel catfish, smallmouth bass, spotted bass and walleye. The stocking effort by the Pennsylvania Fish Commission to reestablish walleye (Table 5) appears to be succeeding with fish of ages 1 through 4 in the catch. The most remarkable recovery has been the spotted bass which made up less than one percent of the catch in the 1984-85 survey but comprised 8 percent of the catch in the 1988 survey. The stocking of tiger muskellunge and the spotted bass/white bass hybrid appear to have had limited success in the lower river with only a few muskies and no hybrids in the catch. The Fish Commission and a private fishing club have stocked over 19 million fishes (primarily walleye fry) in an effort to accelerate the recovery of the fishery in the lower Monongahela River.

Table 1. Summary of Fish Collected by the ORSANCO at the Monongahela River Lock No. 2 - 1968 - 1988.

	1968	1970	1973	1976	1977	1978	1980	1981	1985	1987	1988	1990
Gizzard shad	6	12	271	109	31	9	26	148	103	3226	121K	3
Goldfish			1				1					
Carp	45	98	140	9	2109	79	544	27	24	3	42	29
Golden shiner			1				2					
Emerald shiner	69	60	237	559	3172	1810	210		200			
Spot-tailed shiner											24	
River shiner					1							
Spotfin shiner			15	1	3		3				2	
Sand shiner			47	1	96	2	3					
Mimic shiner		4		1	7	5	56		19		2	
Bluntnose minnow		3	6	3	22	5	32		4		3	
Fathead minnow	1											
Quillback carpsucker				1							1	
White sucker		1		3								
Silver redhorse												5
Black redhorse					2							
Golden redhorse				1			1					
Shorthead redhorse									3	3	3	5
White catfish					8	6	2					
Yellow bullhead		1			64	5	6					
Brown bullhead	69	73	60	1	391	18						
Channel catfish		2	39		448	161	243	206	26	82	155	31
Flathead catfish									1	1	11	1
Trout perch							6					
Rock bass			2								1	
Green sunfish	13				1						7	3
Pumpkinseed			18		3	1	1			2		
Warmouth				1								
Orange-sptd. sunfish		2										
Bluegill	3	4	30	57		2			2	1	27	
Spotted bass										3		
Smallmouth bass									1	6	15	14
Largemouth bass	1	1		7	2		2					
White bass										1	664	3
White crappie					1		5	1	1	3	12	
Black crappie											1	
Johnny darter					1							
Logperch							1		3	1	14	1
Sauger					1					1	2	4
Walleye							2			7	13	
Freshwater drum							2	4	31	94	1040	26
Totals	207	261	867	754	6363	2103	1148	386	418	3434	123K	126
Number of Species	8	12	13	14	19	12	20	5	12	15	21	12

Table 2. Fish Collected from the Monongahela River September 18-22, 1988 (Standard 2 1/2 inch Gill Net) Rivermile 5.0 - 35.4.

Total Fish Collected	784
Total Hours Fished:	215.5
Total Number of Sets	13
Total Number of Species:	20

Size Range (mm)	Sauger	Channel catfish	Spotted bass	Walleye	Smallmouth bass	White bass	Tiger muskellunge	Flathead catfish	Rock bass	Largemouth bass	Green sunfish	Black crappie	White crappie	Yellow perch	Golden redhorse	1/	White sucker	Gizzard shad	Redhorse sucker	Carp	Freshwater drum
0-24																					
25-49																					
50-74																					
75-94																					
100-124											1										
125-149													1								
150-174					1				1												
175-199		1							4			2									
200-224		1	9		2	1			1			5	1								
225-249	1	7	37	1	6	2				1			1	1							
250-274		16	13		8	4				1			1								
275-299	1	42	6		5	7									1						
300-324	2	74	1	7		3									2						
325-349	7	80		36	1										2						
350-374	5	54		14		1		1							1						
375-399	3	29		9																	
400-424	6	24		4																	
425-449		17		3				1													
450-474		7					3	1													
475-499		10					1														
500-524		3					1	1													
525-549		2																			
550-574		2																			
575-599																					
600-624																					
625-649		1																			
650-674							1														
675-699																					
700-724																					
725-749																					
750-774																					
775-799		1																			
Totals	25	371	66	74	23	18	6	4	6	2	1	7	4	1	6		2	32	45	80	11
% Of Catch	3	47	8	9	3	2	1	*	1	*	*	1	*	*	1		*	4	6	10	1

1/ Total Number Only

Table 3. Fish Collected from the Monongahela River September 18-22, 1988 (30-foot Bag Seine) 15.3 - 33.3.

Species	SN#1 RM 15.6	SN#2 RM 15.3	SN#3 RM 15.3	SN#4 RM 33.3
Smallmouth bass	X	X	X	X
Bluegill	X			X
Pumpkinseed	X			X
Logperch			X	

Table 4. Length, Weight, Age Relationship for Selected Species Collected September 18 - 22, 1988 (RM 5.0-35.4)

Species	Age [1]	Length (mm)	Weight (gm)
Smallmouth bass	0	57 - 131	2 - 19
	1	214 - 232	150 - 180
	2	245 - 295	210 - 360
	3	298	410
Spotted bass	1	210 - 238	150 - 225
	2	215 - 280	164 - 380
	3	230 - 325	184 - 295
	4	264	280
Largemouth bass	1	228	220
	2	260	280
Walleye	1	281 - 355	305 - 410
	2	234 - 382	260 - 510
	3	329 - 661	375 - 1389
	4	380	540
Sauger	1	225 - 330	240 - 320
	2	340 - 414	330 - 600
Tiger muskellunge	1		
	2		
	3		
	4	467 - 500	680 - 770

1 Age based on scale readings

Table 5. Fish Stocking Records for the Monongahela River Within the Study Area.

Year	Section	Tiger Muskellunge	Striped bass/ White bass hybrid	Walleye
1983	4	2,000	4,000	2 million fry
	5	1,000	1,300	500,000 fry
	6		not stocked	
1984	4	1,650	6,000	2 million fry 8,000 fingerling
	5	1,150	6,000	6,000
	6	1,150	6,000	5,000
1985	4	not stocked		
	5	not stocked		
	6	not stocked		
1986	4	3,150	0	8,000
	5	2,250	0	6,000
	6	2,250	4,500	6,000
1987	4	3,250	0	12,000
	5	2,250	0	12,000
	6	2,250	0	0
1988	4	0	4,700	0
	5	0	3,400	0
	6	0	3,400	0
1989	4	0	0	3,150
	5	0	0	5,650
	6	0	0	5,650

1 Section 4 RM 0 - 11.2
Section 5 RM 11.2 - 23.8
Section 6 RM 23.8 - 41.5

Sampling results indicate that response to improving water conditions by fishes varies from pool to pool. Furthermore, water quality in the upper river, which is affected by acid mine drainage, probably has shown less improvement than the lower river which is primarily affected by industrial discharges. This is illustrated by the large numbers of fish collected in the lower two pools.

Because of the limited fish sampling data in the Monongahela River, it is difficult to describe exactly what changes have occurred. However, based on the lock chamber surveys, it is safe to assume that the fishery in the lower river has greatly improved since the late 1960's. For example, no fish were collected during the 1967 fish sampling at Maxwell Lock and Dam while 23 species were collected in 1978. Only 4 species were collected from Lock #2 in 1967 and 21 species in 1988.

Total numbers of fish from the lower four pools of the river indicate varying degrees of exploitation of available habitat. Although Pools 2, 3 and 4 contained more natural shoreline habitat, the Emsworth Pool with more impacted shoreline and less fish habitat contained a greater abundance of fishes, primarily channel catfish. Through reproductive success, catfish have been able to exploit their habitat much more rapidly than other species. It should be noted that the Emsworth Pool has no obstructions between it and the Ohio and Allegheny Rivers; therefore, the larger numbers of fish in the catch may be a result of immigration.

Smallmouth bass and walleye were present throughout the study area. Although sauger are abundant in the Ohio River, very few were collected in the lower Monongahela. Eight sauger were collected in Pool 2 and 20 were collected in the Emsworth Pool during the 1984-85 survey and 25 during the 1988 effort. This species is native to the river, but probably was extirpated during the period of poor water quality and is just beginning to repopulate the river. This repopulation probably results from immigrating stocks in the upper Ohio and lower Allegheny Rivers. Walleye probably suffered the same fate, but with the aid of heavy stocking programs, have increased faster throughout the river.

Bass populations in the lower Monongahela River consist primarily of smallmouth bass. Their numbers varied from pool to pool but were collected in moderate numbers whenever adequate habitat was present. Largemouth bass were probably never present in the main channel in large numbers even prior to canalization. Spotted bass were probably extirpated from the river during periods of poor water quality. The 1988 survey indicates a resurgence of the spotted bass population in the lower river.

Forage species collected in the lower Monongahela during this study were not abundant. Only moderate numbers of minnows, suckers and gizzard shad were collected or observed. However, since sampling was confined mainly to the shoreline, many pelagic species inhabiting the main channel were undoubtedly overlooked. Studies examining the strength of forage populations should be initiated by trawling the river at various times of the year.

We can assume the forage base is in good condition because of the large numbers of predators in the lower river. Also, lock chamber surveys have shown adequate numbers of forage species.

Reproductive success by fishes in the river is directly related to water quality and suitable substrate. With improved water quality, substrate may become the single-most significant factor in continued growth of the fishery. Use of the main channel is probably already limited by disturbance from passing barge traffic, especially in shallower reaches. The main channel border is a narrow, silt/sand laden section primarily used by freshwater drum, emerald shiner and gizzard shad. The shore debris zone is littered with fallen trees and other debris and probably is heavily used for reproductive and nursery purposes by fishes. Centrarchids, walleye, sauger and suckers use the rocky and/or gravel slopes in this zone, whereas carp, catfishes and forage fishes seek out the softer sediments and aquatic vegetation. Suckers, walleye and sauger also move into tailwater areas to spawn due to the well oxygenated water and clean rock/gravel substrate. Tributaries and creek mouths also become important recruitment areas for a variety of forage fishes found in the river.

During 1988, an effort was made to determine the extent of the benthic invertebrate community in the lower Monongahela River and the food chain being used by the recovering fish population. Dr. Edwin L. Cooper examined the stomachs of 103 predatory fishes collected during gill net sampling in September 1988. Channel catfish, spotted bass, walleye, smallmouth bass and sauger were collected in sufficient numbers to draw some conclusions about food preference. Of the 76 stomachs with food items in them (25 percent of the stomachs were empty), young-of-the-year gizzard shad was the dominant natural food. Other items consumed included crayfish, unidentified small fishes, flying ants and one small Norway rat. Channel catfish were the most opportunistic feeders, consuming gizzard shad, other fishes, crayfish and flying ants. Spotted bass primarily consumed gizzard shad and other fishes. Four of 27 stomachs examined contained crayfish. Walleyes preyed on fish exclusively. Smallmouth bass and sauger were also primarily consuming fishes. No aquatic invertebrates were found in any stomachs. Dr. Cooper concluded that gizzard shad and possibly the emerald shiner and mimic shiner, due to their abundance in sampling efforts, were the primary food sources of larger predatory fishes.

Water samples, bottom sediments and benthic macroinvertebrates were collected from the Monongahela River (RM 1-42) during September and October 1988 using a petite Ponar sampler, YSI instruments and Hester-Dendy plate samplers. Dr. Gary R. Finni identified the invertebrates and analyzed the

data, publishing his work in a report entitled: The Benthic Macroinvertebrates of the Monongahela River Near Pittsburgh, Pennsylvania, August 1989. Copies of the report and data are available for review at our office.

Based upon Dr. Finni's 1989 report, water quality in the lower 40 miles of the Monongahela River is suitable to support aquatic life. The pH ranged from 6.1 to 8.2, dissolved oxygen from 3.6 to 12.0 ppm and specific conductance ranged from 180 to 400 umhos. Specific conductance was highest upstream. Sediments varied among transects and stations in the river. Strong current areas or areas affected by prop wash from towboats had firm cobble, coarse gravel and gravel bottoms. Quieter reaches had fine sand and silt bottoms. Almost all of the samples had some oil or chemical odor in the sediment both above and below the Ashland Oil spill site (RM 24.6).

A diverse invertebrate community of 139 taxa was collected in the Ponar dredge, kick screen and dip net samples, including hydras, roundworms, moss animals, flatworms, spiny-headed worms, leeches, aquatic worms, crustaceans, insects, snails and clams. Of the 139 taxa, 72 taxa were arthropods, insects and crustaceans and 54 taxa were leeches and aquatic worms. The transects were grouped by the number of taxa present into three sets: lower river (transects 1 through 7), mid-river (transects 8 through 12) and upper river (transects 13 through 16). The mid-river transects had significantly lower species richness than either upstream or downstream transects, which could be attributed to the Ashland Oil spill in January 1988. However, since two mid-river transects occurring above the Ashland Oil spill site were low in diversity and there was higher species richness in the lower river transects, Dr. Finni concluded that no long-term detrimental effects upon the benthic community could be attributed directly to the oil spill.

Invertebrate species richness varied across the transects, with the highest number of taxa occurring along the shorelines (42 taxa in the main channel versus 69 taxa along shore). At least part of this difference was attributed to the effects of prop wash and lack of aquatic vegetation in the middle of the river. In all transects, aquatic worms, midges and Asiatic clams dominated the samples. Aquatic worms were important in transects 1,2,5,6,7,8 and 9 comprising more than 80 percent of the numbers of individuals collected. Asiatic clams were more abundant in the upper transects.

The benthic community in the Monongahela River has shown marked improvement as documented by Dr. Finni's report. Many of the taxa collected are intolerant of pH values below 5.0 and many are intolerant of organic pollution. There appears to be a positive correlation between improved water quality, increased fish population and greater species richness in the benthic community.

The only aquatic plants observed during these studies were limited to several small stands of Potamogeton crispus in the shallow shoreline zone. A scattering of sedges and rushes were observed growing along the waters edge. Algae was abundant on rocks and walls in water less than 2 feet deep. There has been a significant reduction in burreed-dominated aquatic beds and extensive stands of emergent arrowhead, which were documented in the early 1980's in Pool 3. This reduction may be attributed to the scouring action of the November 1985 flood. These wetland plants may return to the shallow water areas in the future if favorable conditions return. The only wetland systems represented in Pools 2 and 3 were riverine aquatic bed (R2AB), riverine emergent (R2EM) and riverine unconsolidated shore (R2UB).

Environmental Contaminants

While significant progress has been made in improving the water quality of the river, point source discharges still pollute the river. In addition to unauthorized and accidental discharges, potential problems with contaminated sediments exist.

The Monongahela River Basin is extensively mined for bituminous coal, most of which is shipped on the river. Much of the coal is used by power plants, several large steel mills, and associated industries located along the river. For most of this century, acid mine drainage, industrial effluent and domestic pollution severely degraded water quality in the river. As a result, all but the most tolerant aquatic fauna were eliminated. Recently, however, a changing industrial base and clean-up efforts have brought about improvements in water quality which have allowed recolonization of the river by fish and other aquatic fauna, as described in the previous section. Water quality, however, remains somewhat degraded due to leaching from abandoned mines in the basin. Improvements in water quality are most evident in the upper river as a result of abatement of acid mine drainage pollution. Improvements are also noticeable in the lower 40 miles of river where industry is concentrated; however, within this reach, municipal and industrial discharges continue to degrade water quality by increasing bacterial growth, lowering dissolved oxygen levels and contributing to excessive concentrations of phenols, iron, oil, heat, and suspended solids.

Sediment analysis by the Corps at 22 river locations in 1975 revealed that all but one of the samples were polluted with volatile solids, COD, Kjeldahl nitrogen, oil, grease, lead and zinc. Eight pesticides were found in the samples. Physical analysis of the sediments showed a variable grain size distribution, most often sand with silt and clay and occasionally, gravel.

A 1981 study by Terrence J. Miller of the U.S. Fish and Wildlife Service conducted for the Ohio River Valley Water Sanitation Commission reviewed levels of contamination of fish tissues in the Ohio River basin for fish collected in 1978, 1979, and 1981.

Lock 3 on the Monongahela River was one of the fish collection sites included in the Miller study. In 1981, whole fish samples of channel catfish and carp from this location had PCB levels of 4.32 and 3.72 ppm, respectively. The current FDA action level is 2 ppm, but the action level is based on fish fillet samples and not whole fish. The National Academy of Sciences/National Academy of Engineering (NAS/NAE) has also established whole fish residue guidelines, based on protection of fish and fish-eating wildlife. Their criteria for total PCB concentrations in whole fish is 0.5 ppm. Therefore, based on this limited sample, fish and fish-eating wildlife could be contaminated and adversely affected by PCB's in this reach of the river.

Chlordane was detected at 0.48 ppm in the channel catfish samples and 0.45 in the carp samples collected at Lock 3. This level was only exceeded in fish from one other site evaluated in Miller's study (Dashields Lock and Dam -- 0.59 ppm in carp and 0.60 ppm in channel catfish). This level exceeds the FDA action level of 0.3 ppm, and the NAS/NAE criteria of 0.1 ppm chlordane. None of the other contaminant residues exceeded published guidelines; however, levels of lead and cadmium may be high enough to suggest a chronic problem.

Additional fish samples were collected from the Ohio River and the lower reaches of the Allegheny and Monongahela Rivers by biologists from the Service, PFC, and the PADER from June 3 to August 15, 1985. During the survey, 25 whole fish and fillet samples were collected for chemical analysis. In many cases, whole fish (not fillets) were analyzed because the legal mandate of the Fish and Wildlife Service is to evaluate the effects of contaminants on fish and wildlife, not humans. Therefore, our results for whole fish should not be compared to FDA "Action Levels," which are based only on edible portion residues. Whole fish analysis includes the entire animal -- skin, bones, internal organs, etc. -- and provides a measure of the amount of contaminants that would be available to wildlife or another fish that preyed upon the sample fish. Preparation of whole fish samples is also more standardized than fillet sample preparation and more easily compared between studies. Fat immediately below the skin in fish and organs such as the liver tend to accumulate more contaminants than muscle tissue. Consequently, whole fish residues are expected to be higher

than fillet ("edible portion") residues. Again, our results for whole fish should not be compared to FDA "Action Levels," which are based only on portion residues. Fillet samples were collected at a number of sites to facilitate analysis of the data by regulatory agencies.

Our 1985 metals results are within the range that would be expected for a major U.S. waterway. Data for seven of the metals (lead, mercury, cadmium, arsenic, selenium, copper, and zinc) can be compared with data from the Service's National Contaminants Biomonitoring Program (NCBP), which collects and analyzes whole fish every other year from over 100 different stations nationwide. The NCBP uses the 85th percentile of residue levels as an arbitrary point to identify samples with "high" (above background) metal residues. A number of samples in our survey exceeded the 1980-1981 NCBP 85th percentile values for cadmium, copper, mercury and lead. One of the 25 samples (smallmouth bass fillets collected at Dashields) exceeded the 85th percentile value (0.06 ppm) for cadmium, containing 0.10 ppm cadmium. All of the 1985 metal residue results are well within the range of those obtained in previous sampling efforts in Pennsylvania.

Copper residues exceeded the NCBP 85th percentile value (0.90) in six of the 25 samples collected. Five of the samples were whole fish and one was a fillet. The maximum value detected was 2.5 ppm in whole rock bass collected near Neville Island.

Three of 17 samples contained mercury residues that exceeded the NCBP 85th percentile (0.18). These were all in smallmouth bass fillet samples. The NCBP samples are all whole fish and our whole fish results for mercury were generally lower than the fillet samples. Two of the lead samples, both in whole channel catfish, exceeded the 1980-81 NCBP 85th percentile value (0.25).

Consistent with previous studies, our 1985 samples contained relatively high PCB and chlordane levels. PCB's exceed the FDA action level in one fillet sample and exceed the NAS/NAE criteria for the protection of fish and fish-eating wildlife in 12 of the 25 samples. While these levels are of concern and could be expected to cause adverse impacts to sensitive wildlife species, they are lower than levels found in earlier studies. A 1979 survey found up to 11 ppm PCB's in whole channel catfish at Dashields. These levels dropped to 6.99 ppm in 1981 and were less than 1 ppm in our 1985 survey. Our highest value was 5.4 ppm in whole channel catfish from the Montgomery embayment on the Ohio River near mile 31.5.

Chlordane exhibited the same trend as PCB's. Two fillet samples exceeded the FDA action level and 14 of the 25 samples equaled or exceeded the NAS/NAI criteria of 0.10 ppm. As with the PCB's, this level is high enough to cause adverse effects in the most sensitive wildlife species, but is below levels detected in earlier studies.

The chlordane trend at Dashields Dam near mile 13.3 on the Ohio River also follows PCB's downward trend. Whole catfish at Dashields contained 1.49 ppm chlordane in 1979 and 0.68 ppm in 1981, while our current highest value at this site was 0.10 ppm in whole smallmouth bass and 0.23 ppm in carp fillets. Total DDT was present in our fish samples at levels up to 0.36 ppm. The ratio of DDT to DDD and DDE is encouraging because it indicates that most DDT in the system is a result of past exposure and not due to new releases.

Lindane, mirex, endrin and toxaphene were below detection limits in all of our samples.

The results of this survey and similar studies indicate that the trend in the upper Ohio River is a decreasing contaminant burden in the fishery. This, coupled with large numbers of game fish now found in the river, is very encouraging. While some caution with regard to current contaminant levels is still warranted, these trends should serve as an indication that the goals of the Clean Water Act are being achieved and that the Nation's investment in pollution abatement is paying off.

Nevertheless, the PCB and chlordane problems of this area should not be overlooked. If past discharges have contaminated sediments, these sediments may now be a significant source of the current fish contamination. Future projects that disturb these sediments must address the potential threats from resuspension and disposal of dredged material. Therefore, sediments should be analyzed to determine the degree of chemical contamination before dredging plans are finalized.

Endangered Species

Three federally listed endangered birds are expected to be found as transient species in the project area. They are the bald eagle (Haliaeetus leucocephalus), peregrine falcon (Falco peregrinus), and Kirtland's warbler (Dendroica kirtlandii). There is no listed critical habitat for these species in the project area. The bald eagle may stop to feed and rest along the river during migration; however, we do not expect to find the Kirtland's warbler or peregrine falcon as regular visitors to the project area. In the summer of 1990, a pair of peregrine falcons was observed in downtown Pittsburgh. However, this project will not affect their activities.

The project area is within the historic range of the Indiana bat (Myotis sodalis), but there are no populations of this species known to occur there. Although there have been no recent collections of endangered mollusks from the Monongahela River, the following federally listed species have historically occurred in the project area: rough pig-toe (Pleurobema plenum) and the pink mucket pearly mussel (Lampsilis abrupta).

Significant changes have taken place in the river since these mollusks were last collected. Water quality, seriously degraded in the past, has improved as a result of water pollution controls and decreased industrialization. Conditions in the river may now favor recolonization by several species previously extirpated from the area.

Species of Special Concern - Fish

Twenty-two fish species of special concern to State agencies are likely to be found in the vicinity of the study area. Classifications were derived from the Pennsylvania Natural Diversity Inventory (PNDI); PFC; and the Pennsylvania Biological Survey (Species of Special Concern in Pennsylvania, 1985).

Three specimens of river redhorse have been collected in the past six years from the lower Monongahela River. Loss of suitable habitat (riffle areas and fast runs) from navigation project construction and operations will keep populations low in the river. The same impacts have probably limited the occurrence of longnose gar. Freshwater drum and spotted bass have sufficiently recovered to remove them from the list.

Other species of special concern (not collected by the FWS) but recently collected in the lower Monongahela are the ghost shiner (Notropis buchanani), smallmouth buffalo (Ictiobus bubalus) and warmouth (Lepomis gulosus). Two specimens of ghost shiners and one smallmouth buffalo were collected by Ecological Analysts, Inc., near Elizabeth, Pennsylvania, in 1978. The only recent collection of a warmouth was one individual collected by ORSANCO at Lock #2 in 1976. The PNDI and the Pennsylvania Biological Survey both list the ghost shiner and the smallmouth buffalo as "Pennsylvania endangered." The warmouth is listed by the PFC and the Pennsylvania Biological Survey as "status undetermined." With the exception of the smallmouth buffalo, it appears that these species will not repopulate in any appreciable numbers in the large rivers of Pennsylvania due to the destruction of habitat by impoundments.

With-Project

All three alternatives will cause adverse impacts to fish and wildlife resources. Plan 1 causes the greatest impact from in-stream dredging, material disposal and loss of tailwater fishery (Table 6). However, Plan 1 would increase shallow water habitat by 76.5 acres, as opposed to +1.4 acres with Plan 4, and no loss under Without-Project Conditions. This will

increase the total area of the river available for fishing, spawning, and nursery habitat. This would have a beneficial effect on reproductive success and year-class strength for fishes using the shore-debris zone of the river, such as centrarchids and catfishes.

Table 6. Summary of Major Habitat Changes from Potential Navigation Improvement Alternatives in the Lower Monongahela River.

Area of Impact	Plan No. 1	Plan No. 4	Without-Project
Shallow Water Habitat (Acres)	+76.5	+1.4	—
Dredging - a. river miles affected	9.5 (RM 32 - 41.5)	0.8 (RM 23.8 - 24.6)	Locks 3 and 4
b. cubic yards	2,432,000	344,450	410,000
Excavation and Dredge Material Disposal (Cubic Yards)	3,272,760	3,868,130	2,604,900
Tailwater (Acres)	-45	—	—

All three alternatives require approach dredging. Plans 1 and 4 have additional dredging because of the pool level changes. Plan 1 requires 9.5 miles and 1,670,000 cubic yards of navigation channel dredging whereas Plan 4 only calls for 0.8 miles and 72,200 cubic yards.

Dredging to maintain a 9-foot channel depth and 300-foot width will cause both short-term and long-term impacts to the aquatic ecosystem. Suspended solids will increase downstream during dredging, reducing light penetration for photosynthetic activity. Oils and other pollutants in the sediments will be resuspended, adversely affecting fishes and benthic communities downstream. Resuspended bottom material will increase COD and BOD and may locally reduce dissolved oxygen levels near the dredge. The natural substrate will be modified in the areas dredged by exposing subsoils and downstream by the deposition of fine sediments. Reshaping the river bottom in shallower sections of the Monongahela may shift current patterns in these reaches and accelerate deposition of finer sediments in the shore-debris zone. This would negatively impact fish reproduction and alter the benthic macroinvertebrate community in this zone. The collection of Anodonta imbecilis in the 1988 survey indicates that water quality may have recovered sufficiently to allow recolonization. Dredging that would alter sedimentation patterns and currents would also influence the distribution and success of reestablishing mussel populations in these areas.

Plan 1 generates about 600,000 cubic yards less disposal material than Plan 4 and about 670,000 more than the Without-Project Condition. All alternative plans will cause a net loss of wildlife habitat with the identified disposal areas. Dredge material with high levels of contaminants, low pH, low nutrient values or with little soil may not support vegetation. Therefore, dredged material should be tested to determine if special treatment is necessary such as liming, fertilizing or mixing topsoil over the surface to ensure successful revegetation. With proper planning and selection of plantings beneficial to wildlife, most of the wildlife habitat losses should be recovered over time. A similar problem exists with disposal of construction debris from removal of the existing locks and dams. This material will require burial and covering with a layer of topsoil before any vegetative plantings could be accomplished. Any remaining wildlife losses will be more than compensated through the gains in riparian habitat with Plans 1 and 4.

BOD - # pounds of O_2 that will be consumed in the biochemical oxidation of organic impurity present.

Plan 1 will eliminate lock and dam No. 3 on the river. This will eliminate a tailwater fishery and productive spawning areas for suckers, walleye and sauger. The tailwater sport fishery usually extends only a short distance downstream of the dam but suitable spawning sites may extend as far as a half mile downstream. Therefore, we estimate that 45 acres of tailwater habitat would be eliminated by removal of Dam 3. This habitat loss could have an adverse impact on fishes using this zone in the lower river. Also, water spilling over the dam and the resulting turbulence helps aerate the water. Removing dam may also depress dissolved oxygen levels downstream during low flow periods when oxygen demand is high.

Disposal Sites

On July 26, 1989, six potential disposal sites were visited with the Corps of Engineers representatives near Bunola, Pennsylvania. Four sites were deemed unsuitable due to their small size and topography. Although previously strip-mined, these sites were lushly vegetated and barely recognizable as old mines.

Two sites appear to have potential for dredge material disposal. The first site is a wooded ravine west of Bunola Run partially disturbed by previous human activity. There would be some loss of wildlife habitat which would require replacement.

On November 7, 1990 two additional spoil disposal sites were investigated. The Dunlevy site is along the left descending bank of the Monongahela River between river miles 44.8 and 45.1. The site has been previously disturbed by filling and road clearing. Two small perennial streams cross the site and two small and two large wetlands occur within the proposed disposal and handling area. If this site is used, the wetland boundaries must be delineated and every effort made to avoid filling or degrading the streams and wetlands found on the site. Of all the disposal areas reviewed, this one has the greatest potential for adverse impacts to fish and wildlife resources.

The Coursin Hill Site lies in a steep ravine on the right descending bank across from Clairton. There is a small perennial stream though the center of the site but no wetlands were found. The entire ravine is deciduous forest dominated by red oak. The woods are mature with little ground or shrub cover. Because of the natural setting, perennial stream and little human disturbance, the site would have slightly more adverse environmental impacts than the Bunola site.

Mitigation

The objectives of these mitigation measures are to provide in-kind replacement for Resource Category 2 habitats and insure no net loss of habitat value for Category 3 habitats (either in-kind or out-of-kind). We consider shallow water habitat and the tailwaters to be Resource Category 2 which should be replaced by creating shallow water habitat within the new pools. Forest habitat is Resource Category 3 and, therefore, all areas covered by disposal should be replaced by other wildlife habitat of equal or greater habitat value.

Aquatic Mitigation

Plan 1 will inundate Pool 2 shoreline vegetation within the ordinary high water line. If all shrubs less than 4" dbh are left in the areas to be flooded and numerous larger trees are cut and anchored to their stumps, habitat for centrarchids and forage fishes would be greatly improved. If trees cannot be anchored and left in the water due to potential navigational hazards, then the trees should be cut off several feet above the ground but below the depth of pleasure boat draft at normal pool (or high enough to be out of the water and visible during high flows). The portion of the stumps below water would not rot for many years, and would provide improved habitat for centrarchids and forage fishes. Each acre of river bottom enhanced through this technique could compensate for an acre of shallow water habitat lost by proposed changes in pool levels.

Concrete rubble from the removal of existing locks and dams with either plan could be placed along the shoreline in irregular patterns to improve fish habitat. The addition of small ridges of rubble extending into deeper water

perpendicular to the bank, short fingers of fill, and isolated piles of rubble along the shoreline could also improve fish habitat. The surface area of these structures should, at least, compensate on a one-for-one basis for the surface acres of tailwater habitat loss caused by removal of one dam.

Since a new dam will be constructed with Plan 4, the opportunity exists to enhance fisherman access near the facilities. Access and parking should be provided on either side of each dam. Bank areas below the dam could be graded to provide a flat area for fishermen. Adequate flow and water depth to attract fishes should be maintained within casting distance of bank fishermen. It is important that the dams be designed with features to enhance reaeration of the water. The Pennsylvania Fish Commission as well as the Service should be involved in the design and construction of these facilities.

The loss of Dam 3 with Plan 1 will eliminate a tailwater fishery and reduce sport fishing opportunities in the lower Monongahela River. This should be compensated through creating fisherman access along the lock side of old Lock 3 and below Locks and Dams 2 and 4 along the tailwaters.

Terrestrial Mitigation

There is a significant opportunity to improve wildlife habitat on disposal areas by planting vegetation valuable to wildlife. Care should be taken to ensure adequate habitat for all life requisites for species that would use the area. The best way to ensure success is to plant a large variety of herbaceous, deciduous and evergreen species. Fruit- producing trees and shrubs such as sumac, autumn olive, crabapple, dogwoods, honeysuckle, locust and rose enhance the area for both birds and mammals. Conifers such as Norway spruce or pine trees provide winter cover and roosting/nesting sites for several bird species. The density of plantings should be based on an 8-foot spacing for trees and 4-foot for shrubs. The trees and shrubs should be clumped and interspersed with grassy areas to allow for invasion by old-field species. Adjacent strip- mined areas with low habitat value could be improved using a similar design. Some addition of topsoil, lime and fertilizer is usually required for these areas. We are willing to work with the District to develop detailed site revegetation plans.

Recommendations

The Service favors either Plan 4 or the Without-Project Alternative because they are less environmentally damaging than Plan 1. The most significant impact of Plan 1 over the other alternatives is the loss of one tailwater classified as Resource Category 2, requiring in-kind replacement. Since the tailwater cannot be replaced in-kind under Plan 1, the Service, therefore, strongly feels that mitigation for the 45 acre tailwaters lost be compensated to the greatest extent possible by creating spawning shoals, riprapped banks and other features to enhance spawning by walleye, sauger and suckers.

All plans will result in short and long-term adverse impacts to the environment and loss of fish and wildlife resources. To offset these losses, the Service recommends that the following mitigation measures be implemented:

1. The environmentally preferred plan be implemented.

2. Borrow sites and disposal sites should be developed to improve their wildlife value through plantings.

3. Shrubs less than four inches dbh in areas to be flooded should not be cut. Trees should be cut off with two feet of the stumps left standing in the water.

4. The rubble from all locks and dams removed should be placed along the banks in the area to be flooded to provide additional aquatic habitat. This proposed mitigation feature could result in substantial cost savings to the government for material disposal.

5. Avoid dredging during critical fish spawning and nursery periods (May 1 through July 1).

6. Public access facilities should be provided along both banks below the new dam. The tailwater areas produced by the dam will be focal point of anglers. Present fisherman use is low at all three facilities because of access problems.

7. Operating schedules and dam crest designs should be developed which would allow flows over certain parts of the dams to attract fish to shoreline fishing areas and increase dissolved oxygen downstream. These flows could improve fishing success.

8. Since tailwater areas are important spawning sites for several game fish in the river, the creation of spawning shoals in the tailwaters of the existing and proposed dams by the disposal of clean rock and gravel is highly recommended. A blanket of stone riprap along the outside bends of the river would also create suitable habitat to replace tailwater areas. Significant aquatic benefits and cost savings to the government may be realized by this measure.

9. All materials for disposal should be tested for contaminants and handled and disposed of according to EPA guidelines.

References

U.S. Environmental Protection Agency. 1979. Summary of Ohio River Fishery Surveys

U.S. Fish and Wildlife Service 1982. Planning Aid Report, Fish and Wildlife Resources of the Monongahela River from the Pennsylvania/West Virginia Border to Pittsburgh, Pennsylvania. 64p.

U.S. Fish and Wildlife Service. 1984. Planning Aid Report, Fish and Wildlife Resources of the Lower Monongahela River, Locks and Dams 2, 3 and 4. 45p.

U.S. Fish and Wildlife Service. 1985. Planning Aid Report, Fish and Wildlife Resources of the Upper Ohio River. 55p

COMMONWEALTH OF PENNSYLVANIA

PENNSYLVANIA
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January 28, 1991

Mr. Charles J. Kulp, Supervisor
U.S. Fish and Wildlife Service
Suite 322
315 South Allen Street
State College, PA 16801

Dear Mr. Kulp:

This is in response to your letter requesting our review and comments to the Draft FWCA 2(b) report for the proposed Lower Monongahela River navigation project prepared by your office for the U.S. Corps of Engineers, Pittsburgh District.

Our office review has determined that no significant adverse effects on wildlife or wildlife habitats are expected, therefore, we concur with your report. However, should plans change and additional information becomes available on threatened or endangered species, this determination may be reconsidered.

If you have any questions, please contact Gregory J. Grabowicz or Robert Culp of my staff at (717) 783-5957.

Very truly yours,

Jacob I. Sitlinger, Director
Bureau of Land Management

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
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April 5, 1991

U.S. Fish and Wildlife Service
Charles Kulp, Supervisor
Suite 322
315 South Allen Street
State College, PA 16801

Re: Draft FWCA 2(b) Report - Lower Monongahela River Navigation Project

Dear Mr. Kulp:

The April 1991 Draft FWCA 2(b) Report, revising that of December 1990, seems to both accurately describe the Monongahela River's rebounding aquatic resources and assess potential fisheries impacts of the several alternatives, including the Corps of Engineers' Tentatively Recommend Plan 1 navigation improvements. The Pennsylvania Fish Commission concurs that loss of shallow water habitat and elimination of a tailwater with its public fishing value are the major concerns, and also with the Service's preference for Plan 4 or, better yet, the "Without Project Alternative" which actually would involve refurbishing of all three dams.

The mitigation concepts of compensating for shallow water and tailwater habitat by leaving brush and trees in newly flooded areas and by strategically placing demolition rubble, respectively, are acceptable to the Fish Commission, along with Recommendation 8.'s spawning shoals. It's agreed, too, that provision of angling access should receive maximum attention, not only at the dams but also anywhere that necessary project easement lands or right-of-ways could be developed or simply left as informal bank fishing or boat launching areas. In fact, my only suggested change in the Report regards public access - the "or" in the last line of paragraph 4 on page 16 should be replaced by "and" to further emphasize the importance of developing additional safe, accessible fishing areas along the lower Monongahela. "Creating fisherman access along the lock side of old Lock 3 and below Locks and Dams 2 and 4 along the tailwaters", as well as at any other feasible location along the River, is highly desirable.

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Regarding dredged material disposal, the mention of possible stream conflicts is disturbing - perennial stream valley fills should be avoided. Depending on the nature of the material, consideration could be given to creating additional shoreline irregularities as at least a partial disposal alternative.

Thanks again for the opportunity to comment, and please continue this project coordination.

Sincerely,

Ron Tibbott

Ron Tibbott, Hyd. Eng. Tech.
Division of Environmental Services

RT:srh

cc: PFC - Ammon
Hyatt
Small
Lorson
PGC - Sitlinger