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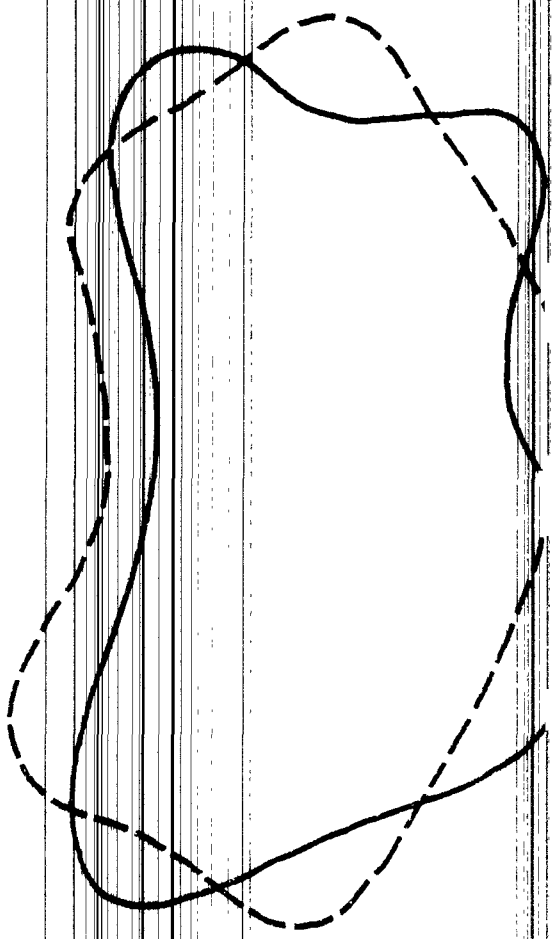

PROTOTYPE EVALUATION OF SELECTED NEPA PREDICTED ENVIRONMENTAL IMPACTS FOR CONSTRUCTION GRANTS PROJECTS

Contract No. 68-04-5017
Delivery Order No. 41-27

Prepared For:

United States Environmental
Protection Agency, Region V
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James C. Williamson, Project Manager

March, 1985

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March 30, 1985

Mr. Larry Adams-Walden (5WFI-12)
U.S. EPA, Region V
230 South Dearborn Street
Chicago, Illinois 60604

Re: D.O. 27 Manual Evaluation-Final Deliverable

Dear Larry:

This letter is to confirm hand-delivery of three (3) copies of the Final Prototype Evaluation Report and the camera-ready originals to your office on April 1, 1985. All EPA comments and revisions have been incorporated.

In addition, I have attached three copies of a separate document which describes ESEI's conclusions and recommendations regarding use of the Manual.

These deliverables complete the requirements of D.O. 27. On behalf of ESEI, I wish to thank you for your cooperation in bringing this Delivery Order to a successful conclusion.

Very truly yours,

ESEI, inc.

James C. Williamson

JAMES C. WILLIAMSON
Project Manager

Michael S. Friedman
Project Administrator

Enclosures

cc: Mr. Gene Wojcik
Ms. Elissa Speizman

CONCLUSIONS AND RECOMMENDATIONS REGARDING USE OF THE MANUAL FOR EVALUATING PREDICTED AND ACTUAL IMPACTS OF CONSTRUCTION GRANTS PROJECTS

Introduction

Substantial experience was gained by the original study team and the edit/review study team during the preparation of the Prototype Reports*. As such, a number of conclusions and recommendations were formulated regarding use of the Manual. These are presented in the following sections relative to each Prototype Reports. The last section is reserved for some general recommendations.

Conclusions Based on Wetlands/Floodplains Prototype

The following recommendations were made regarding the overall approach (method), data base documentation (field investigations), and EPA program management.

° Strict Manual interpretation of "no impact" to always mean a measurable impact of zero is a necessary assumption in order to standarize impact analysis, but the limited syntax of that term probably affected the reviewers' selection of candidate projects. "No impact" was actually found to mean either (a) zero impact to wetlands/floodplains, or (b) no wetlands/floodplains affected. The former would be a candidate project while the later signifies a project to be eliminated from consideration. Unless standard terminology can be developed and implemented to distinquish between these two meanings, it will be necessary for reviewers to investigate each "no impact" project in sufficient depth to make this determination.

° Field investigations are necessary to observe actual impacts. Prior to a field visit, all available data and data requests should be reviewed and organized. A field contact is invaluable to reviewers in order to explain any project modifications since the NEPA document and to provide a pre-construction

* Prototype Evaluation of Selected NEPA Predicted Environmental Impacts for Construction Grants Projects - March 1985.

environmental setting in more detail than that presented in the document.

° Field observations are to be documented by the use of handwritten notes, sketches, tape recorders, photographs, or whatever combination provides the most thorough record of the visit. Any delay between the site visit and the report preparation (or visiting a series of project sites) will diminish the recollection of the reviewers. Therefore, complete documentation in the field is necessary.

° Standardization of evaluation categories for each issue (floodplains, wetlands, etc.) is needed when planning documents are written. NEPA documents often predict impacts without reference to specific categories. The evaluation of these types of predictions requires the reviewer to select categories which best reflect the predicted impacts and then make further decisions regarding the intensity or degree of impact. This situation is unduly subjective and not conducive to program evaluation. NEPA documents are developed as tools to be used in a decision-making process. The objective of collecting and presenting data in these predictive documents is to provide enough information so that a decision concerning the environmental acceptability of a project can be made. This objective does not necessarily require a consideration of the data base needed for long-term monitoring of parameters nor does it necessarily require a detailed presentation of all assumptions and considerations employed in professional judgments. These types of considerations, however, are essential to the evaluation of impact predictive accuracy and program evaluation. By standardizing categories and parameters relative to the long-term monitoring and evaluation needs of future NEPA documents, the documents would lessen subjective interpretations by reviewers of projects or programs and provide a more useful data base to conduct longitudinal program evaluations.

Conclusions Based on Population Predictions Prototype

° The Manual was very useful in identifying the census sources of information and identifying a methodology for analysis. It should be noted though that significant additional time over time anticipated was required to use the RTP computer system.

° The SCADS installation took a great deal of time. The support of staff at RTP, while very helpful, was not geared to provide the large amount of time necessary for installation and data processing. Additionally, the STF3 tape files which were discussed in the Manual were not directly accessible. There is, in fact, only one person at RTP who has functional knowledge of the location of the tapes and their volume designations. His name is George Duggans and he works in the Economics Division of the RTP facility. The primary contact for consultation was Thomas Lewis, who proved to be very resourceful and helpful. The relative novelty of the raw STF3 tape files for many analysts and the time needed to work with SCADS suggests that use of these resources be fully understood for their time and manpower requirements. The tapes are documented and are readily available via computer programer staff who have experience with interfacing and data base construction.

Conclusions Based on Land Use Plan Prototype

° As its name implies, the Manual basically provides procedures for evaluating the accuracy of NEPA predicted impacts of Construction Grants projects. The socioeconomics chapter deals with land use issues, but not land use plans. It is believed that the inexperience of the original study team did not permit an adequate transition from the Manual to the task required. Thus, instead of an "in-depth analysis of the projects...", the definition of Projects Elements was incorrectly perceived as an evaluation of the accuracy of predictions of impacts on land use plans. Thus, it is believed the user of the Manual should be knowledgeable in the subject area being studied and in basic research technique which includes organizing files and thoroughly

documenting the procedual steps employed. It is strongly suggested that experienced senior staff with CG experience and knowledge of CG programs and policies in Region V be used.

° The Manual is designed for determining the accuracy of NEPA impact predictions. It contains no procedures for preparing an "in-depth analysis of projects" having different characteristics. Although the Manual can assist a researcher with such a task (i.e., data collection, data compilation, various evaluations of the data), objectives which are beyond the limits of the Manual should be accompanied by additional procedures; general or specific depending upon the experience of the researcher.

° Data collection is an important effort but can be very time consuming and labor intensive. Where the objective of the study relies on an analysis of comprehensive data from some minimum number of projects, an accurate estimate of the data collection effort should be derived before establishing a budget limit for this task. In this case, full NEPA documentation should have been obtained from consulting engineers or applicants as well as from EPA files, and current land use planning data should have included changes in zoning as well as land use plans. It is quite possible that, in many cases, a trip to the appropriate planning or zoning agency would have been necessary to obtain and properly verify the required data.

Conclusions Based on Bloomington/St. Cloud Prototype

° The NEPA documentation on Bloomington's sewage treatment facilities was a superb example of the NEPA process in action. It is a success story which resulted in the avoidance of substantial construction-related impacts to raparian habitat and water quality as well as long-term development related impacts to Lake Monroe and the surrounding lands. The process also provided the necessary sewage treatment facilities at a cost several million dollars less than that of the facilities plan's recommended project. Unfortunately, these facts are irrelevant with respect to the use of Manual, since the Manual's objective is to assess the

accuracy of impacts predicted for the constructed project not impacts avoided by altering the facilities plan project.

Since EPA intends to employ the Manual in its future policy-making efforts regarding conduct of the Construction Grants Program and NEPA implementation, it is clear that EPA's objective extends far beyond the simple determination of NEPA impact predictive accuracy. Rather it is to determine the effectiveness of NEPA's ability to preserve and enhance environmental quality. As demonstrated in the Bloomington prototype report, the strict application of the Manual to evaluate impact accuracy does not reflect the impacts avoided nor cost savings accrued. It is conceivable that in addition to the Manual, a separate procedure applicable to NEPA projects which resulted in a significant alteration of the facilities plan project, should be carried out as part of a full program evaluation. Its purpose would be to assess impacts avoided because of the NEPA process which otherwise would have occurred, bought and paid for with 75% federal funds.

General Conclusions

- In general, it is believed that the data needed for application of the Manual are not located in readily accessible, computerized data bases. Therefore, substantial labor may be required to compile and verify the data necessary to an evaluation or to develop the required data bases for general application. Given the constraints of budget, manpower and time schedules, prioritization of the issues to be evaluated via the Manual should be carried out with respect to their importance to policy-making.

- Prototype reports completed under Delivery Order 027 all used a criterial elimination method for selecting projects to be studied. It is recommended that a prototype report on an aggregate of projects for a programmatic evaluation be conducted using the statistical reduction method of sampling projects described in the Manual.

° From the projects reviewed during the preparation of D.O. 027, a majority of the NEPA predicted impacts evaluated were qualitative. These required interpretation by individual reviewers. Depending upon the knowledge and experience of the reviewer, the reviewer's particular point of view, the available data, and analytical time, it appears that substantial variations in the results and conclusions are possible.

° Finally, it is recommended that the Manual receive wider agency review and comments and be refined prior to board application and use in regional or national policy-making.

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Appendices

Disclaimer

Extrapolation of findings in these Prototype Reports require caution. While additional time and dollars were provided to edit the findings, no additional time nor dollars were provided to resolve every anomaly, to pursue best possible data, nor to verify all data.

INTRODUCTION

The promulgation of the National Environmental Policy Act (NEPA) in 1969 established a process by which federal agencies were required to assess the environmental impacts of their actions. With the passage of P.L. 92-500 in 1972, also known as the Federal Water Pollution Control Act (FWPCA), a detailed facilities planning process was defined as part of the Construction Grants program. The Agency's environmental review responsibilities of individual facilities plans are defined in 40 CFR Part 6 (Implementation of Procedures on the National Environmental Policy Act). Additional policy and guidance documents have been issued which provide technical guidance regarding the scope of USEPA's environmental review process.

Throughout the 1970's, environmental impact assessment methodologies were refined, areas of concern expanded and environmental data bases accumulated. Also, the intensiveness with which certain environmental issues were evaluated changed with the passage of specific federal legislation or requirements such as those relating to wetlands and floodplains. Secondary impacts, those associated with the development stimulated by a Construction Grants (CG) project (but not the project itself), became an important issue.

Beginning in 1978, EPA began delegation, a process by which many of the administrative functions of the Construction Grants program were turned over to state agencies. Although EPA established its role as the oversight agency of the Construction Grants program, many of its direct environmental review functions were delegated to the states. The Agency has always maintained final NEPA authority to determine whether an Environmental Impact Statement (EIS) or Finding of No Significant Impact (FNSI) should be prepared. However, in many cases where facilities plan review has been delegated, detailed reviews are accomplished at the state level where an environmental assessment (EA) is prepared and EPA's responsibility is carried out based only upon its review of this often brief EA. Furthermore, the use of categorical exclusions from NEPA compliance requirements and the elimin-

ation of Step 1 and 2 grants reflect the evolution of EPA activities from direct scrutiny to oversight responsibilities on Construction Grants projects.

As an oversight agency responsible for NEPA decisions, EPA must periodically determine the effectiveness of the Construction Grants Program and NEPA in restoring the quality of the nations' waters and in protecting the environment. As such, a methodology was developed for evaluating the accuracy of NEPA predicted environmental impacts. This methodology is presented in EPA's Manual for Evaluating Predicted and Actual Impacts of Contruction Grants Projects. The methodology can be applied to single project, groups of projects, or an entire program.

This report, intended as a companion document to the Manual, presents four examples of the Manual's use which illustrates its versatility, strengths and weaknesses. Each was originally prepared by a different study team and later edited and revised by another team based on draft review comments. Thus, each example reflects an individual interpretation and use of the Manual. Field reports, notes, evaluation forms, narratives on judgments and the like are retained as Appendices, one for each Prototype Report, filed in the Environmental Impact Section, EPA, Region V.

The examples employed in the prototype reports are confined to four specific environmental concerns: (1) Impacts on Wetlands and Floodplains, (2) Impacts of Population Predictions, (3) Impacts on Land Use Plans, and (4) Evaluation of Two Completed NEPA Documents. They represent two types of program elements: analysis of specific environmental issues and analysis of individual projects.

Objectives of the prototype reports were to: "test" the Manual's utility in practical application; address the four specific environmental concerns mentioned above; drawing conclusions where possible on the accuracy of predicted versus actual environmental impacts; making necessary revisions to the Manual; and provide the user with the benefit of this background experience prior to their use of the Manual. Another objective was to comprehend the quality and quantity of work that could be accomplished within rigid time and dollar constraints.

Briefly, the purpose, scope, data characteristics, applied analysis, and presentation of findings for each prototypical case are provided below:

- Impacts on Wetlands and Floodplains

  Purpose - Determining the accuracy of environmental impacts predicted in the NEPA planning documents and assessing the effectiveness of NEPA in minimizing adverse impacts and protecting the beneficial values of wetlands and floodplains

  Scope - Primary impacts

  Data Characteristics - Predominately qualitative, manual files

  Applied Analysis - Comparative, aggregate analysis of project areas

  Presentation of Findings - Quantitave measurement of qualitative data

- Impacts of Population Predictions

  Purpose - Evaluating the 1980 population projections contained in the NEPA documents of CG projects with actual 1980 Census data

  Scope - Region-wide

  Data Characteristics - Predominately quantitative data in machine readable files, computers

  Applied Analysis - Comparative, aggregate analysis of project areas

  Presentation of Findings - Statistical description of analysis with tables showing mean and average percentage error

- Impacts on Land Use

  Purpose - Determining the accuracy with which the NEPA process assessed the impact of CG projects on land use, and, thus the effectiveness of NEPA in preventing adverse impacts

  Scope - Secondary impacts

  Data Characteristics - Predominately interviews, maps, land use ordinances

  Applied Analysis - None [Task/Skill Misalignment]

  Presentation of Findings - Corrective anecdotes, pitfall analysis

- <u>Impacts: An Evaluation of Two Completed NEPA Planning Documents</u>

  Purpose - Determining the accuracy with which NEPA planning documents assessed the impacts of two specific CG projects

  Scope - Critique and/or evolution of project

  Data Characteristics - Predominately reports and interviews

  Applied Analysis - Comparative analysis and/or process analysis

  Presentation of Findings - Accuracy and category of impacts and/or staff influence on the NEPA process

For information on how to provide comments on this process, see Appendix D of the Manual.

PROTOTYPE REPORT
IMPACTS ON WETLANDS AND FLOODPLAINS

Purpose

The purpose of this investigation was to determine the accuracy of environmental impacts predicted in the NEPA planning documents and to assess the effectiveness of NEPA in minimizing adverse impacts and protecting the beneficial values of wetlands and floodplains. The procedure used is described in EPA's Manual for Evaluating Predicted and Actual Impacts of Construction Grants Projects.

The remaining sections of this report document the specific steps carried out by the study team from the definition of the project elements through the findings of the analysis. Where appropriate, there is a discussion concerning the assumptions made, time intervals considered, and the sequencing of specific steps.

As an aid to future users of the Manual engaged in similar investigations, a generic methodological approach was developed. Figure II-1 presents a flow chart summarizing the major steps accomplished in this evaluation. The steps are numbered in sequence as they were accomplished.

Definition of Project Elements

The issue examined in this evaluation was the accuracy of NEPA predicted impacts to wetlands and floodplains resulting from the building of wastewater transport or treatment facilities. While impacts to wetlands and floodplains were addressed as distinctly different NEPA issues (as they are in the Manual) in nature, they often occupy the same area. Therefore, throughout this report wetlands and floodplains are referred to in parallel, i.e., wetlands/floodplains; except where only one is specified.

As in most inquiries, budget and time constraints help to predetermine the magnitude of the evaluation. Note that this evaluation, due to budget and time constraints, did not include anal-

TABLE II-1

GENERIC APPROACH TO PROJECT DATA GATHERING FOR WETLAND OR FLOODPLAIN ISSUES

1 Search USEPA "EA Log" for projects receiving wetland or floodplain review comments. Create preliminary list of projects consisting of project name and grant number.*

2 Request of GICS, Transaction Numbers: G3, N4, N5, 29, 32, 87, 99 (or modify to suit needs) for preliminary project list. GICS generates all grant numbers for these projects.

3 Screen out all grant numbers except those in Step 3, and of those projects >50% constructed.

4 Grant applicants may be represented by multiple grant numbers. Identify consolidated list of grant applicants and needs numbers.

5 Manually search USEPA's EA file for project summaries for each of these grant applicants.

6 Review project summaries to determine whether primary impacts had been predicted for wetlands and/or floodplains in or adjacent to project construction area.

7 Based on above information, use best professional judgment to decide whether to pursue or drop each project investigation using this guidance:

- If primary impacts do discuss wetlands and/or floodplains, then pursue project.
- If primary impacts indicate "no impact", interpret as "zero impact" and pursue project.
- If wetlands/floodplains not mentioned or it is stated that there are no such areas in project, use available project map to verify such statement. If statement can be confirmed, document such and drop project. If statement cannot be confirmed because of inadequate map, make decision to either (a) assume there are no wetlands/floodplains impacts and drop project or (b) allow approximately 2-3 weeks to locate appropriate project data and proceed to the above steps.

8 Create Final list of projects for investigation.

9 Obtain NEPA document(s) from most accessible source: EPA, state or consulting engineers. Allow 2-4 weeks for this step regardless of source.

* Where crucial information is unrecorded, misfiled, or possessed only by members of the organization staff, specific resource persons may be consulted.

TABLE II-1
(continued)

GENERIC APPROACH TO PROJECT DATA GATHERING FOR WETLAND OR FLOODPLAIN ISSUES

10 Extract from NEPA document(s) primary impacts and identify baseline data needed to fully understand issues. Begin to fill in Manual Evaluation Form.

11 Collect additional baseline data as needed and data updates, as available, for each project. Allow minimum of 4-6 weeks for this activity.

12 Review and organize available information (from NEPA documents and additional baseline data collected) for each project in terms of:

- predicted impacts,
- mitigating measures, and
- related issues that would involve use of other Manual chapters besides Wetlands and Floodplains.

Identify and document data gaps for which there is no available information.

13 Organize and schedule field investigations as all data for the project become available. Contact, as appropriate and/-or available, someone involved with (a) project construction, (b) facilities management or (c) facilities operation for each project.

14 Conduct field investigations to observe (a) actual impacts, (b) implementation of mitigating measures, (c) indirect or related impact issues, and (d) unanticipated impacts. Utilize local project contact to (a) reconstruct baseline (pre--construction) situation and (b) explain project site modifications that have deviated from original plan. Each site visit requires two observers, 1-2 days project time, and the use of whatever visual aids/recording devices optimize site observations.

15 Compare observed impacts with predicted impacts. Evaluate the accuracy of quantitative impacts and interpret the author's intent in qualitative impacts using professional judgment. Document all assumptions and judgments in a supporting narrative field investigation report. This report must accompany the completed project evaluation forms.

16 Completed project evaluation forms and supporting narratives are available for trend analysis or other pertinent aggregate project analysis.

yses of secondary impact issues. This evaluation was concerned with building-related, primary (direct) impacts where project construction was located either within or adjacent to wetlands and/or floodplains. The initial scope of primary impact categories included area (size) of wetland/floodplain affected, wetland/floodplain boundary encroachments, topographic and/or drainage patterns, soil loss (floodplain only), total design flow and cost estimate. Note that impacts related to a number of other project elements could also be associated with wetlands/floodplains. However, these are addressed separately in the Manual and were specifically excluded from this evaluation.

In addition, two other areas of impact were examined; unanticipated/unforeseen impacts, and mitigating measures (short and/or long-term). The evaluation of these project elements is discussed in Chapter XIV of the Manual under Interrelated Issues.

Identification of Projects to be Examined

The original list of projects was generated from EPA, Region V's, Environmental Impact Section file called the "EA (Environmental Assessment) Log". The EA Log spanned the years between early 1977 through mid-1984. All projects which had a wetland or floodplain comment included in the "comment column" by the EPA document reviewer were selected. In many instances the comment expressed the need for a "Statement of Findings" concerning wetlands or floodplains in the environmental assessment. (A Statement of Findings is the term given to the Council on Environmental Quality (CEQ) December 15, 1979, procedures for implementation of the Executive Orders 11990 and 11988 on Wetlands and Floodplains.) Another example of an EA Log comment was "wetland issue" or "floodplain issue". The more recent EA Log records (1982-1984) contained a specific column heading for "Wetlands/-Floodplains Statements of Findings" which required a yes/no response. From this exercise, the reviewers identified 70 projects which were listed by grant numbers and by whatever project name was found in the EA Log.

The grant number and project name for each of the 70 projects were entered into the regional Grants Information Control System

(GICS), and the following information was initially requested by transaction numbers (TN) for each project:

29 - EPA cost estimate,
32 - Facility or needs number,
87 - Project step code (Step 1, 2, 3),
99 - Total design flow,
G3 - Consultant - code number and name,
N4 - EIS code and date,
N5 - Completion code and date.

Items #29 and #99 were not utilized during this study due to time constraints of sorting the data to provide a cost per design flow profile. They have application in future studies where aggregate project samples may be comparatively profiled by project cost and total design flow.

A computer printout of grant numbers was generated by GICS from the original list of 70 prospective projects. The listing was created by requesting all grant numbers that might exist for a given grant applicant. Grant amendments, as well as project steps (1, 2, 3), are assigned separate grant numbers, thus, a list of 160 grant numbers was produced. Appendix A-1 presents the computer printout of the 160 projects.

From the list of grant numbers, projects were selected using the following criteria: (a) project in Steps 3 or 4 of the Construction Grants process, (b) project greater than 50% constructed, and (c) applicable complete information available. All entries not meeting these criteria were eliminated from further consideration. This screening step resulted in 63 grant numbers. It was assumed that multiple Step 3 grants having the same facility (needs) number were the same project. Thus, the 63 grant numbers represented 20 candidate projects (Table II-1).

At this point in the selection process, the list of projects was not supplemented by individuals having knowledge of suitable projects for study, but not documented in the EA Log. This might be described as a resource person. It is useful when crucial information may be unrecorded, misfiled, or possessed only by members

TABLE II-1

CG PROJECTS GREATER THAN 50% CONSTRUCTED
POTENTIALLY HAVING WETLAND/FLOODPLAIN ISSUES

	State	Applicant Name	Grant Number
1.	Illinois	Mason, Village of	170595001
2.	Illinois	Edgewood, Village of	170595002
3.	Illinois	Westfield, Village of	173202001*
4.	Indiana	Carmel, Town of	180015002*
5.	Indiana	Schneider, Town of	180114001*
6.	Indiana	Fort Wayne, City of	180225001
7.	Indiana	Jackson County RSD	184714001
8.	Michigan	Leslie, Village of	260063001*
9.	Michigan	Muskegon, County of	260214001*
10.	Michigan	Pontiac, Township of	260570001*
11.	Michigan	Alpena, County of	262000001*
12.	Michigan	Calhoun County BPW	262006001
13.	Michigan	Berrien County DPW	262101001*
14.	Michigan	Missaukee, County of	263208001*
15.	Minnesota	MWCC	270001001
16.	Minnesota	Northfield, City of	270036001
17.	Minnesota	Paynesville, City of	270299001
18.	Minnesota	Cokato, City of	270347001*
19.	Minnesota	Ortonville, City of	271104001
20.	Minnesota	Lester Prairie, City of	275804001

* Project documents obtained.

of the organization staff. Use of such knowledgeable persons in this way is another valid approach to project identification.

EPA's EA file was seached manually for project summaries for each of the 20 candidate projects. An EA is a NEPA document and public record description of a proposed CG project including location maps, feasible alternatives, comparative impacts and mitigation measures to minimize predicted impacts. Attached to it is a letter of Negative Declaration (later termed "Finding of No Significant Impact" - FNSI) stating that based on a review of the project planning document(s), preparation of an EIS was not warranted. Ten of the 20 project summaries contained language referencing wetlands or floodplains as indicated in Table II-1 with asterisks.

Project summaries for the ten projects referencing wetlands and/or floodplains were reviewed to determine whether primary impacts had been predicted. Seven of the ten projects made no mention of wetlands/floodplains impacts under the heading "Major Primary Impacts of Project". Projects were eliminated from further consideration using the following guidelines: (1) if an adequate project location map was included, the conclusion of no wetland/floodplain impacts was confirmed and the project was dropped, (2) if the project map was inadequate for determining wetland/floodplain locations or was missing from the project summary, the reviewers assumed no wetlands or floodplains impacts and the project was dropped. Additional time would have been required to document these assumptions with appropriate project data (estimate: 2-3 weeks).

Three projects remained for evaluation. The Westfield, Illinois, summary stated that the project was "not within a floodplain". Thus, it was dropped from further consideration. The two remaining candidate projects (Muskegon, Michigan, and Schneider, Indiana), were summarized as having "no impact" to wetlands or floodplains. This was interpreted as a quantified impact of zero according to the Manual.

Two projects were not considered sufficient to meet the goal of this investigation. Therefore, a decision was made to consult

with experienced personnel (resource persons) at EPA, Region V, and the states in an attempt to identify other candidate projects. Five additional projects were identified:

- Menasha, Wisconsin,
- Brillion, Wisconsin,
- Lester Prairie, Minnesota,
- Ortonville, Minnesota, and
- Cuyahoga Valley Interceptor Project, Ohio.

All of these projects were part of the preliminary project list but were dropped because of (a) incorrect grant numbers or grant applicant names, or (b) project summaries were not available in EPA project summary files. These projects were, therefore, considered suitable for inclusion in the investigation.

Two projects from this semi-final list of seven were eliminated. The Lester Prairie, Minnesota, project proposed an outfall structure and no other facilities to be built in the floodplain. The Minnesota Pollution Control Agency (MPCA) did not consider this an adverse impact to the floodplain. Therefore, this project was dropped from further consideration in this analysis.

The Muskegon, Michigan, project involved the rehabilitation of an existing outfall to a wetland/creek. According to the Michigan Department of Natural Resources (MDNR), the Muskegon planning document did not address wetland impacts nor did it acknowledge that the proposed actions would result in any permanent environmental damage. Because the wetland/creek had received impacts from earlier projects previous to the proposed rehabilitation, the reviewers at the suggestion of MDNR, deleted this project from further consideration.

The final list of projects for aggregate analysis consisted of the following:

- Cuyahoga Valley Interceptor Project, Ohio,
- Ortonville, Minnesota,
- Brillion, Wisconsin,
- Menasha, Wisconsin, and
- Schneider, Indiana.

Their general locations are shown in Figure II-2. Table II-2 summarizes basic GICS file information as well as wetlands/floodplains locational information (relative to construction) gathered prior to NEPA document review for each of the final projects. Figure II-3 is a diagramatic synopsis of the project selection procedure. Figure II-4 summarizes, in a pie chart format, the result of project selection for this study.

Compiliation of Data

NEPA document(s) were requested for each of the selected projects. EPA provided the Facilities Plan/EA and EIS for the Cuyahoga Valley Interceptor Project. The State agencies responsible for facilities planning were then contacted for either a copy of each needed document or a document loan. It was determined that State agencies often keep single copies of approved facilities plans and do not loan these documents. Additional time (estimate: 1-2 weeks) would have been required to travel to the State agencies involved to review their document copy and any supplementary project files. Instead, documents were obtained from the consulting firms who conducted the planning. The engineers' names were obtained from the GICS printout (TN-G3). The addresses were obtained from the State facilities planning sections.

The engineers contacted and the arrangements made were as follows:

- Project: Schneider, Indiana
  Engineer: PTGR
  158 Napoleon
  Valparaiso, Indiana 46383
  (219) 462-1158
  Document Arrangements: Document on loan, $10.00 express mail fee.

FIGURE II-2

LOCATIONS OF FINAL WETLANDS/FLOODPLAINS SITES SELECTED FOR AGGREGATE ANALYSIS

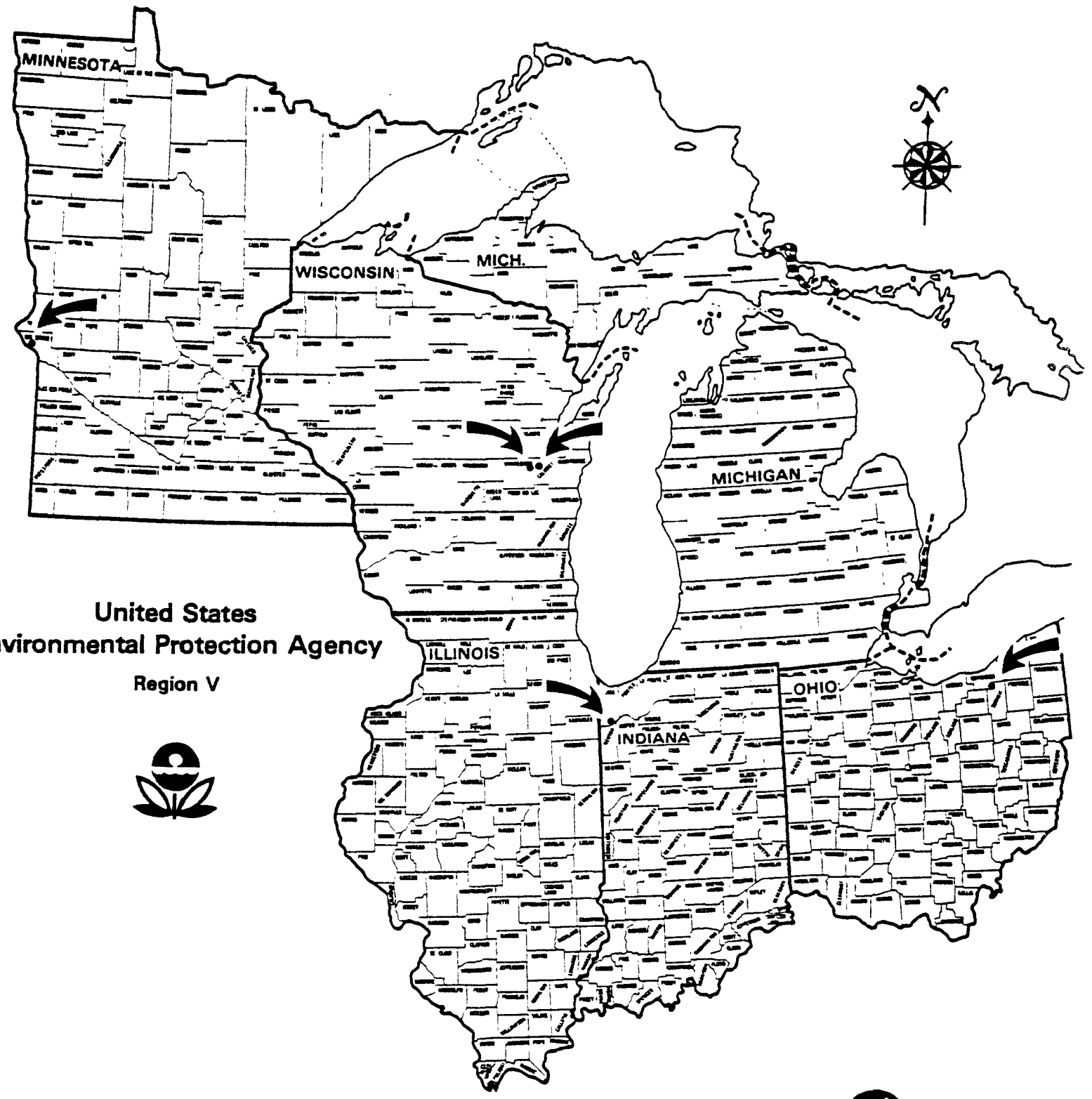


TABLE II-2

BASIC GICS DATA AND LOCATIONAL DATA FOR EACH OF THE FINAL WETLAND/FLOODPLAIN PROJECTS

Grant Applicant	Geographic Location	Grant Number	Type of CG Study	(Construction Project Completion Date	Percent Complete	Facility (Needs) #	EPA Cost Estimate	Design Flow (mgd)	Consultant Name & Code Number	WETLANDS		FLOODPLAINS	
										In Const.	Adj. to Const.	In Const.	Adj. to Const.
Town of Schneider	Northwest Indiana	180444002	FP/EA	8/23/83	97	180114001	1,108,000	.065	Peller Tanck Gertsmeier & Reinert, Inc. 0663	Maybe		Yes	
City of Ortonville	West Central Minnesota	271245002	FP/EA	6/28/84	92	271104001	2,622,700	.037	Ellerbe Assoc., Inc. 0832	Yes	Yes	Maybe	Maybe
Menasha (formerly Butte des Morts Utility District)	East Central Wisconsin	551275N020	FP/EA	2/22/84	100	557340001	6,333,400	3.9	McMahon Associates, Inc. 0572	Yes	Yes	Yes	Yes
Brillion Utility Commission	East Central Wisconsin	550875C030	FP/EA	3/28/82	100	55068001	3,687,851	.25	McMahon Associates, Inc. 0572	Maybe	Yes		Maybe
Northeast Ohio Regional Sewer District (NEORSD) Cuyahoga Valley Interceptor	Northeast Ohio	Multiple 391126030C through 391126070C	FP/EA and EIS			391666001			FP/EA: Havens & Emerson 0388 EIS: WAPORA	Yes	Yes	Yes	Yes

FIGURE II-3

PROJECT SELECTION

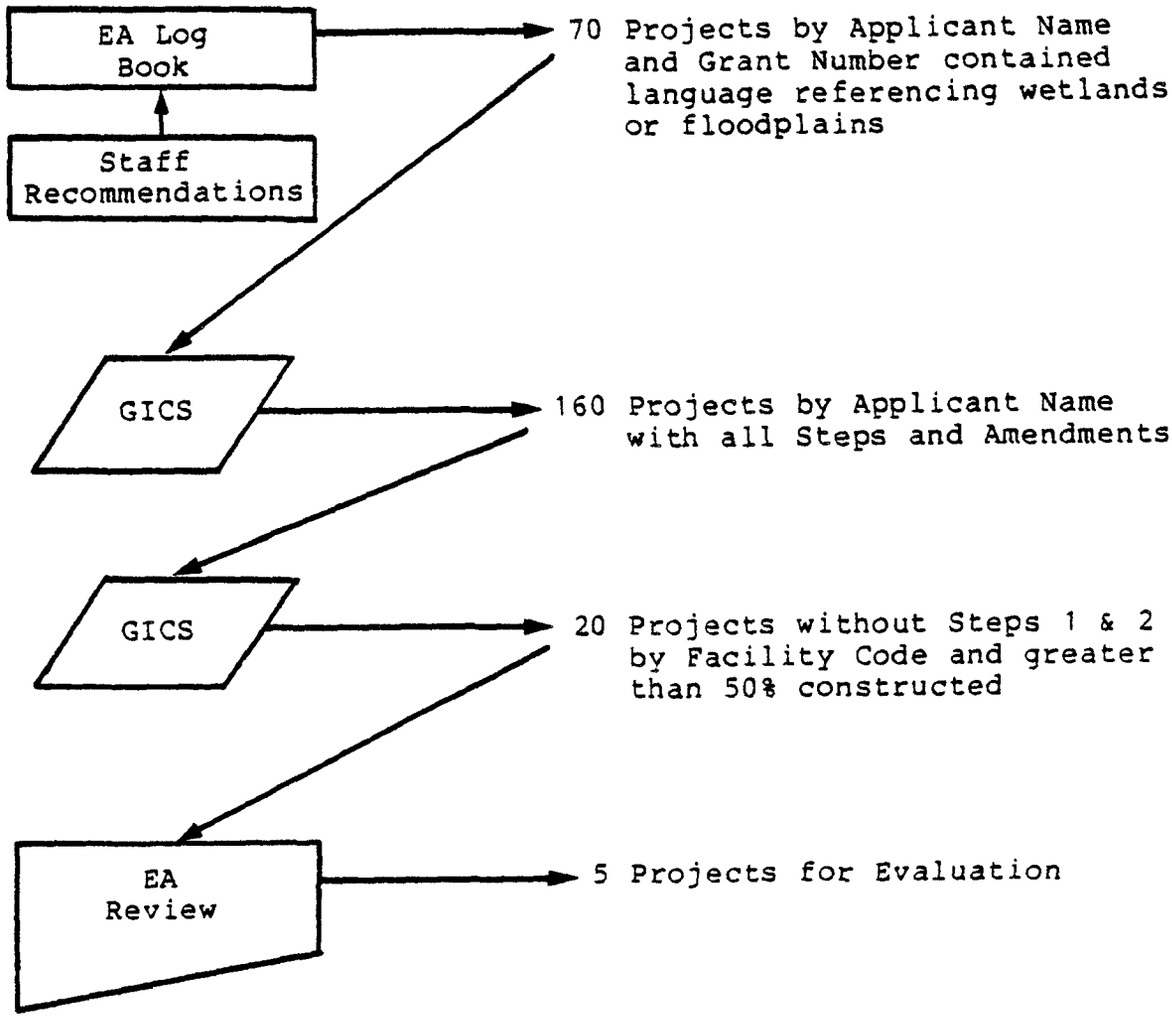
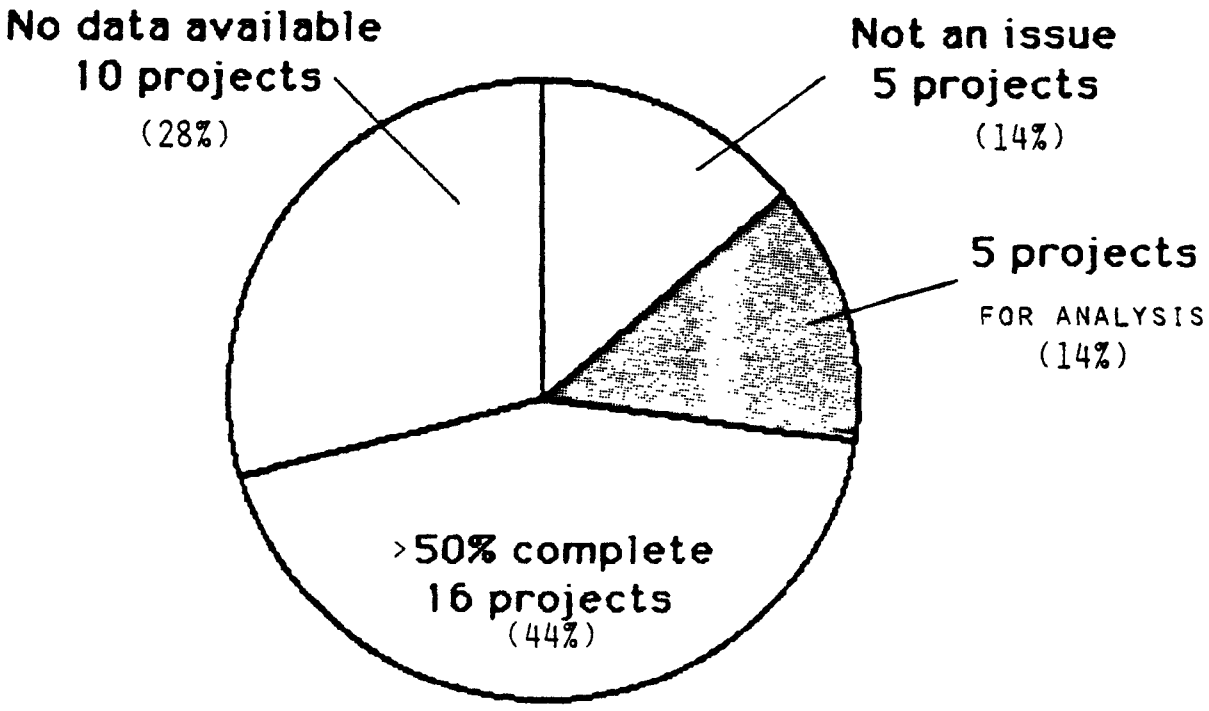


FIGURE II-4

Project Selection for Wetland and Floodplain Aggregate Analysis



TOTAL = 36 CONSTRUCTION GRANTS FACILITIES
(160 separate grant numbers)
having wetland or floodplain
comments in the EA log

- Project: Ortonville, Minnesota
  Engineer: Ellerbe Associates, Inc.
  One Appletree Square
  Minneapolis, Minnesota 55420
  (612) 853-2000
  Document Arrangements: Mailed 2 volumes, one on loan, no charge.

- Projects: Menasha and Brillion, Wisconsin
  Engineer: McMahon Associates, Inc.
  1377 Midway Road
  Menasha, Wisconsin 54952
  (414) 739-0351
  Document Arrangements: Mailed one document, no charge; made visit to their offices to review other documents while in area for site visit.

The time interval required to obtain these documents (2-3 weeks) was judged to be average considering the involvement of a consultant locating old documents, copying and mailing time.

Once the NEPA documents were received, the reviewers extracted information related to the primary impacts and mitigating measures applicable to wetlands and/or floodplains. This information was found in various sections of the facility plan/EA's, except in the impact analysis section; appendices, correspondence, supporting project files, public hearing records, and EPA project summaries.

Impacts were extracted as direct quotes, interpretations or paraphrasing and as either quantitative or qualitative statements. Each impact or mitigation was documented by source and type. In addition, reviewers identified the baseline data needed to fully understand project issues. Evaluation forms were completed as specified in the Manual. A separate form was completed for each impact in each project.

All supplementary baseline data ("before" project), as needed for each project, and data updates ("after" project) were collected by telephone requests. The major sources of data generally

needed to adequately characterize a project are presented below. The Directory of Environmental Data bases (WAPORA, 1983) or telephone directory assistance was used to locate telephone numbers.

- USGS 7.5 minute Topographic Map
  (requested by quadrangle name)
  Source: State DNR or equivalent agency
  Map Sales Department

- USFWS National Wetland Inventory Map
  Source for Ohio and Indiana:
  Eastern Mapping Center (NCIC)
  536 National Center
  Reston, Virginia 22092
  (703) 860-6636
  Source for Illinois, Michigan and Minnesota:
  Mid-Continent Mapping Center (NCIC)
  1400 Independence Road
  Rolla, Missouri 65401
  (314) 341-0851
  Source for Wisconsin:
  WDNR
  Geology and Natural History
  Madison, Wisconsin
  (608) 263-7389

- FEMA FIRM Map
  (requested by community numbers)
  Source: National Flood Insurance Program
  Post Office Box 34604
  Bethesda, Maryland 20817
  (1-800) 638-6831

- USGS Floodprone Areas Map
  (if "c" is not available)
  Source: State USGS office or State DNR
  or equivalent Flood Planning Section

- USDA - SCS Soil Survey
  Source: State USDA office or

County SCS office

- EPA River Reach File
  (requested by longitude and latitute)
  EPA, Region V
  Stuart Ross - STORET
  (312) 353-2061

All available information from NEPA sources and additional data collected were organized for each project in terms of predicted impacts, mitigating measures, and related issues that would involve the use of other chapters of the Manual besides Wetlands and Floodplains. Data gaps particularly related to the "after" project condition, were identified and documented. IT WAS CONFIRMED THAT FIELD INVESTIGATIONS WERE ABSOLUTELY NECESSARY IN ORDER TO DETERMINE THE ACTUAL PROJECT IMPACTS. All "after" project data that may have been collected were utilized as supplemental, supporting documentation.

Field investigations were organized, scheduled and conducted. The five sites were visited by two reviewers within a period of two weeks. Handwritten notes and photographs were taken to record observations. In all cases, except Schneider, Indiana (the first visit), a field contact was arranged with either the construction (consulting) engineer, the WWTP operator, or facilities manager. These contacts proved to be invaluable sources of information concerning the "before" project setting and to explain project modifications (change orders) subsequent to the approved NEPA document that may have altered environmental impacts. The field investigation schedule is summarized in Table II-3.

Evaluation of Data

Observed impacts ("after" project conditions) were compared with predicted impacts using the specific evaluation steps in the Manual chapters on Wetlands and Floodplains Issues. A narrative field investigation report was written and project evaluation forms completed for each project. This information provides the

TABLE II-3

GENERAL SCHEDULING SUMMARY OF FIVE SITE VISITS
July, 1984

	Schneider, Indiana July 17	Cuyahoga Valley, Ohio July 19-20	Menasha, Wisconsin July 24*	Brillion, Wisconsin July 24*	Ortonville, Minnesota July 27**
Method of Travel	car	air/car rental	air/car rental	air/car rental	air/car rental
Distance from South Bend Office (Round Trip)	220	550	560	620	1340
Total Travel Time (days)	1	2	1	1	1-1/2
Actual Time Spent at Project Site (hours)	1	12	1-2	1	2

* Menasha and Brillion, Wisconsin, are located approximately 30 miles apart.
** Ortonville and St. Cloud, Minnesota (case study) trips were scheduled together.

data base for the aggregate analysis discussed in the next section.

Each evaluation form summarizes data on a single impact that can be aggregated for trend analysis. The field investigation report documents the assumptions made by the reviewers in the interpretation of impacts (both predicted and observed). These reports should be reviewed in their entirety by others who conduct similar analyses. Note that they were not intended to be, nor should they be construed as, case study reports. The field investigation reports and evaluation forms are located in Appendix A.

Findings of Analysis

A manual table of findings was developed as a tool to compile and summarize impact information. Had the sample been larger, the data could have been computerized for this analysis. Tables II-4 on Wetlands and II-5 on Floodplains present the the aggregate analyses for this study. In the left column, each of the predicted impacts (and/or mitigations) from each project was related to an appropriate impact category: size, boundary encroachment and drainage patterns for the Wetlands issues, size, storage capacity, drainge patterns and soil loss for the Floodplain issues. The list of categories may be expanded in future studies if desired.

The record column contains the impact statement found in the NEPA document (and sometimes a mitigation measure). This predicted impact is evaluated as either quantitative or qualitative. In many cases, the original statement was not written in the form of a prediction, but rather presented as an item of information. The reviewers interpreted this as a qualitative impact of minimal magnitude and, therefore, the qualitative impact column was checked.

For each predicted impact, field observations were used to evaluate the accuracy of the prediction. The choices under the column heading "Accuracy of Predictions" include "yes" (the pre-

TABLE II-4

SUMMARY OF FINDINGS
AGGREGATE ANALYSIS OF WETLANDS ISSUE

Wetland Categories	Impact Statement (and mitigation)	Predicted Impacts		Accuracy of Predictions (Observed Impacts)			Implementation of Mitigating Measures		
		Quantitative	Qualitative	Yes	No	Could Not Evaluate*	Yes	No	None Required
Size of Area Affected	Proposed access shaft #16 will cross small portion of wetland at Sanitary Road which will be temporarily filled (391126030 - 391126070)		X	X			X		
	Tunnel construction requires 1-2 acres for access site for equipment, storage and work space - temporary (391126030 - 391126070)	X		X			X		
	30 wetland basins totaling 18.6 acres may not be filled, burned or drained during use of 120 acre site for spray irrigation (271245002)	X		X			X		
	A small portion of the wet area at access shaft #3 will require fill. Modification is minimized & consolidated at one edge of the wet area (391126030 - 391126070)		X			X		X	
	Access shaft #17 requires 1-2 acres. A portion of the wetland at this site close to the Brecksville WWTP will be affected 9391126030 - 391126070)		X	X			X		
Wetland Boundary Encroachment by Construction	WWTP would occupy approximately 5 acres adjacent to proposed Brillion Marsh Wildlife Area (550875030)	X		X					X
	During interceptor construction, proper drainage will be maintained and site grading in road right-of-way will minimize wetland encroachment (551275020)		X	X			X		
	Construction of 4 stabilization ponds on 80 acres would have very minimal effect on natural wetland basins (271245002)		X	X			X		
	Construction may encroach into long narrow type 3 wetland located south of proposed site (271245002)		X	X					X
	Access site #15 moved from swamp-type forest to adjacent drier, higher area (Mitigation) (391126030 - 391126070)		X				X		
	A small marshy area lies to the north and east of the 1-2 acres needed for access shaft #5 (391126030-391126070)		X	X				X	
	Much of the 1-2 acre site needed for access shaft construction (#8) lies in a marsh at the foot of the valley wall although location of access shaft is on slope of hill (391126030-391126070)		X			X	X		
	Access shaft #13 was located within wetland. Shaft site and trunk sewer moved to clearing on fill (391126030 - 391126070)		X	X			X		
Topographic or Drainage Patterns	Tunnel construction may have a draining effect and dewater adjacent wetlands (391126030 - 391126070)		X		X		X		
	Lowering of the water level will drain some of the normally flooded wetlands (391126030 - 391126070)		X			X	X		

* For explanation and documentation, see appropriate Field Investigation Report identified by grant number.

TABLE II-5

SUMMARY OF FINDINGS
AGGREGATE ANALYSIS OF FLOODPLAIN ISSUE

Floodplain Categories	Impact Statement (and mitigation)	Predicted Impacts		Accuracy of Predictions (Observed Impacts)			Implementation of Mitigating Measures		
		Quantitative	Qualitative	Yes	No	Could Not Evaluate	Yes	No	None Required
Size of Area Affected	Two acre minimum site requirement for WWTP in floodplain (180444002)	X		X					X
	Loss of 1.6 acres of Type 7 (and some Type 2) wetlands by filling for WWTP construction (551275020)	X		X			X		
	Construction activities will be limited as nearly as possible to physical boundaries of the proposed project (551275020)		X	X			X		
Changes in flood storage capacity (or area)	Construction of the mounded area (5-8 ft. high; 2 acres) for the WWTP site will change flood storage capacity within floodplain (180444002)	X		X					X
	Loss of this wetland/floodplain area will not measureably affect flood elevation of Little Lake Butte des Morts (551275020)		X	X					X
Topographic or Drainage Patterns	Localized changes in drainage patterns around mounded WWTP site (180444002)		X	X					X
	Project will involve modification of immediate landscape but will not affect natural drainage (551275020)		X	X			X		
	Interceptors will be constructed in floodplain areas. This impact is minimal. (550875030)		X	X			X		
Soil Loss from Floodplain	Embankment around plant sodded to minimize erosion (includes mitigation) (180444002)		X	X			X		
	Erosion of site will be kept to a minimum during construction and will be prevented afterward by maintaining grass cover on all exposed slopes on the site (551275020)		X	X			X		

dicted impact is considered accurate), "no" (the predicted impact is considered not to be accurate), or "could not evaluate" (neither data base, data update, nor field observation is sufficient to make a judgment). Decisions and judgments are fully documented in the field investigation report. The identifying grant number is located after the entry of each impact in Tables II-4 and II-5, on each evaluation form relating to that project and on the cover page of each field investigation report (Appendix A).

The last column in the tables addresses the implementation of mitigating measures. The choices include "yes", "no", and "none required". In some cases, reviewer interpretation was necessary to judge whether an impact was sufficiently mitigated relative to the mitigation required by the NEPA document. This documentation is, also, found in the field investigation report (Appendix A).

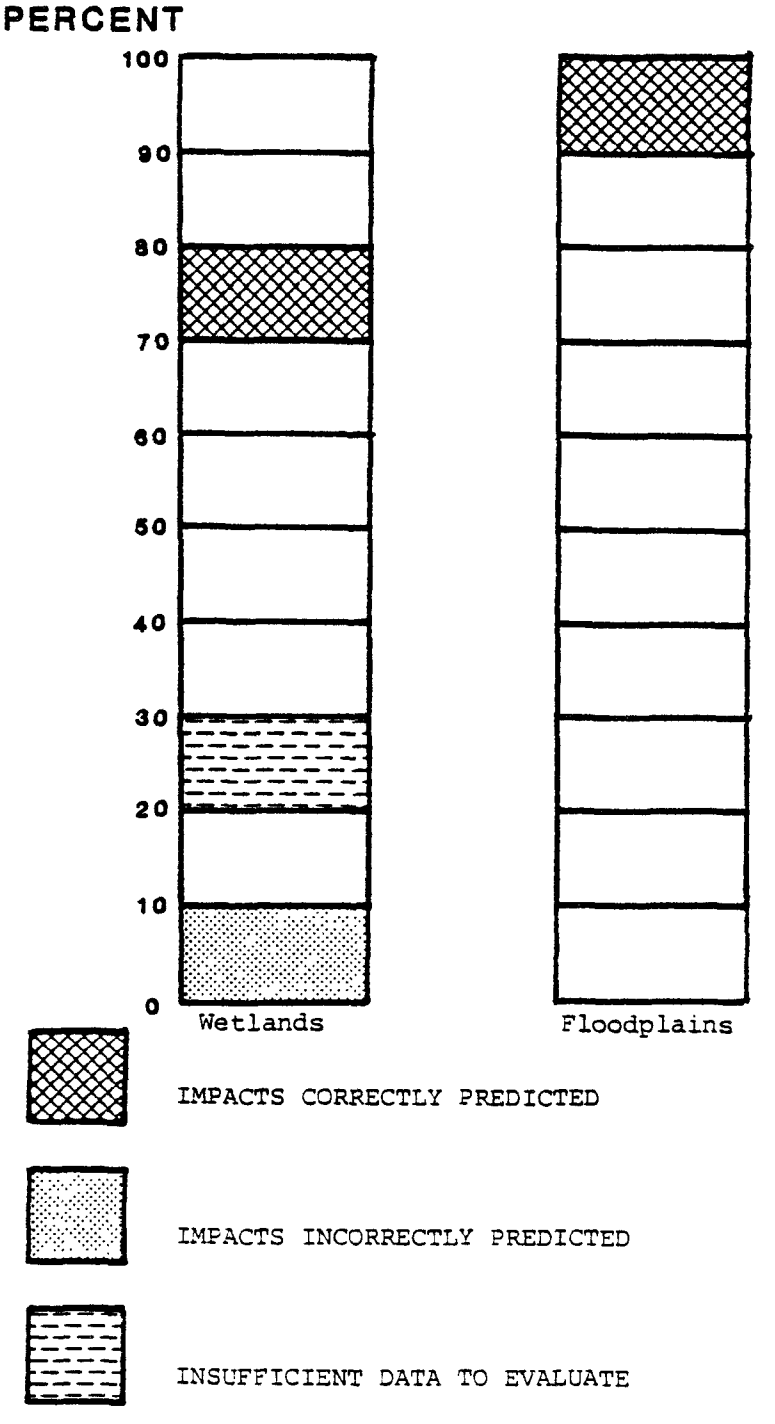
Figure II-5 summarizes the accuracy of predictions for Wetlands and Floodplains Issues by percent of total impacts predicted. The majority of predictions made in NEPA documents were judged to be accurate when compared against 1984 field observations.

Unanticipated impacts occurred in two projects: Grant Numbers 271245002 and 391126030-391126070; Ortonville and Cuyahoga Valley Interceptor, respectively. In one case, runoff from a constructed embankment created a more stable water regime in a small adjacent wetland. Prior to construction, this wetland probably experienced more hydrologic fluctuation on an annual basis. This was considered a beneficial, unanticipated impact.

In another case, the unanticipated impact involved the mitigation measure. The expectation was no long-term adverse impact because wetlands affected by interceptor construction (short-term impacts) would be returned to pre-construction topography and seeded with grasses. Eventually, wetland species would re-establish because the environment was suitable for their colonization.

FIGURE II-5

Quantitative Measurement of Findings *



*Comparative Range of Values of Predicted/Actual Impacts for Wetlands/Floodplains

It was observed that a portion of the wetland (previously owned) was destroyed by filling after construction, rather than being restored. This resulted as an unanticipated impact because when construction occurs on private land, where only an easement is necessary for access, the expected mitigation may not be implemented unless there is a grant stipulation to that effect.

Some general conclusions can be drawn from the findings of this analysis. There was a noticable difference between documents that pre-dated and post-dated the EPA Wetland and Floodplain Protection Implementation Policies (1979). Differences were noted in the extent to which these issues were addressed and the level of impact analysis undertaken. It was more common for a predicted impact to address acreage lost/affected than to address possible long-term effects on the quality of that resource and/or its ability to continue its natural function.

Most of the predicted impacts derived from NEPA documents, regardless of their data, were qualitative. It was not uncommon to find a statement of information instead of a predictive statement of impact (i.e., "Much of the 1-2 acre site needed for access shaft construction lies in a marsh at the foot of the valley wall, although the location of the access shaft is on the slope of a hill"). In each case such as this, the reviewer had qualitatively interpreted a statement of minimal, long-term, adverse impact.

Based on documented field observations, most predicted impacts were judged to be accurate. Quantitative predictions were evaluated with field observations and appropriate qualifying remarks. Additional effort (time, equipment and specific skills) would have been required to evaluate quantitative predictions of acreage using surveying equipment.

In almost all cases, mitigating measures were implemented to the extent that the reviewers determined was intended in the NEPA document. Adjacent, undisturbed areas were utilized for baseline comparison.

Conclusions

As a result of this study, certain recommendations can be made regarding the overall approach (method), the data base documentation (field investigations), and EPA program management.

- Project selection and sample size were substantially affected by the completeness and accuracy of the EPA data base. Also, EPA's project summary files should be amended to identify adjustments after a FNSI, when project changes affect environmental consequences.

- On the basis of the sites visited in this study, two observers are required for field investigations since there are times when one must focus all attention on driving while the other functions as navigator, primary observer and recorder. At other times, both can observe.

- The field investigation report format helped to document explanations of the assumptions used for making decisions that require professional judgment. Examples of this are the interpretation of qualitative impacts, degree of significance of impacts, and the definition of an acceptable margin of error within which two values are considered to be equivalent. Most impacts were found to require some amount of reviewer interpretation, as the criteria or logical assumptions used needed to be documented.

- Because of the importance of documentation of assumptions, the Field Investigation Report is needed as a supporting data base to the Project Evaluation Forms. The report must accompany the evaluation forms.

- For the objectives of this study, National Wetland Inventory Maps are not always an essential part of the data base. The scale of these maps (1:24000) makes identification and evaluation of small wetlands extremely difficult and sometimes impossible.

- Standardization of evaluation categories for each issue (floodplains, wetlands, etc.) is needed when planning documents are written. NEPA documents often predict impacts without reference to specific categories. The evaluation of these types of predictions requires the reviewer to select categories which best reflect the predicted impacts and then make further decisions regarding the intensity or degree of impact. This situation is unduly subjective and not conducive to program evaluation. NEPA documents are developed as tools to be used in a decision-making process. The objective of collecting and presenting data in these predictive documents is to provide enough information so that a decison concerning the environmental acceptability of a project can be made. This objective does not necessarily require a consideration of the data base needed for long-term monitoring of parameters nor does it necessarily require a detailed presentation of all assumptions and considerations employed in professional judgments. These types of considerations, however, are essential to the evaluation of impact prediction accuracy and program evaluation. By standardizing categories and parameters relative to the long-term monitoring and evaluation needs of future NEPA documents, the documents would lessen subjective interpretations by reviewers of projects or programs and provide a more useful data base to conduct longitudinal program evaluations.

PROTOTYPE REPORT
IMPACTS OF POPULATION PREDICTIONS

Purpose

The goal of this effort is to evaluate the 1980 population projections contained in the NEPA documents of Construction Grants (CG) projects with actual 1980 census data. From a comparison of the predicted 1980 total population for CG planning areas with the actual 1980 census population figures, a significant discrepancy in population figures by size of community, county, state or geographical area could be indicative of an even wider discrepancy at the end of the 20-year planning period. This could have the effect of altering the projected needs placed on CG project facilities.

The flow chart presented in Figure III-1 displays the six steps involved in conducting the evaluation. Each step is detailed in the following sections.

Definition of Project Elements

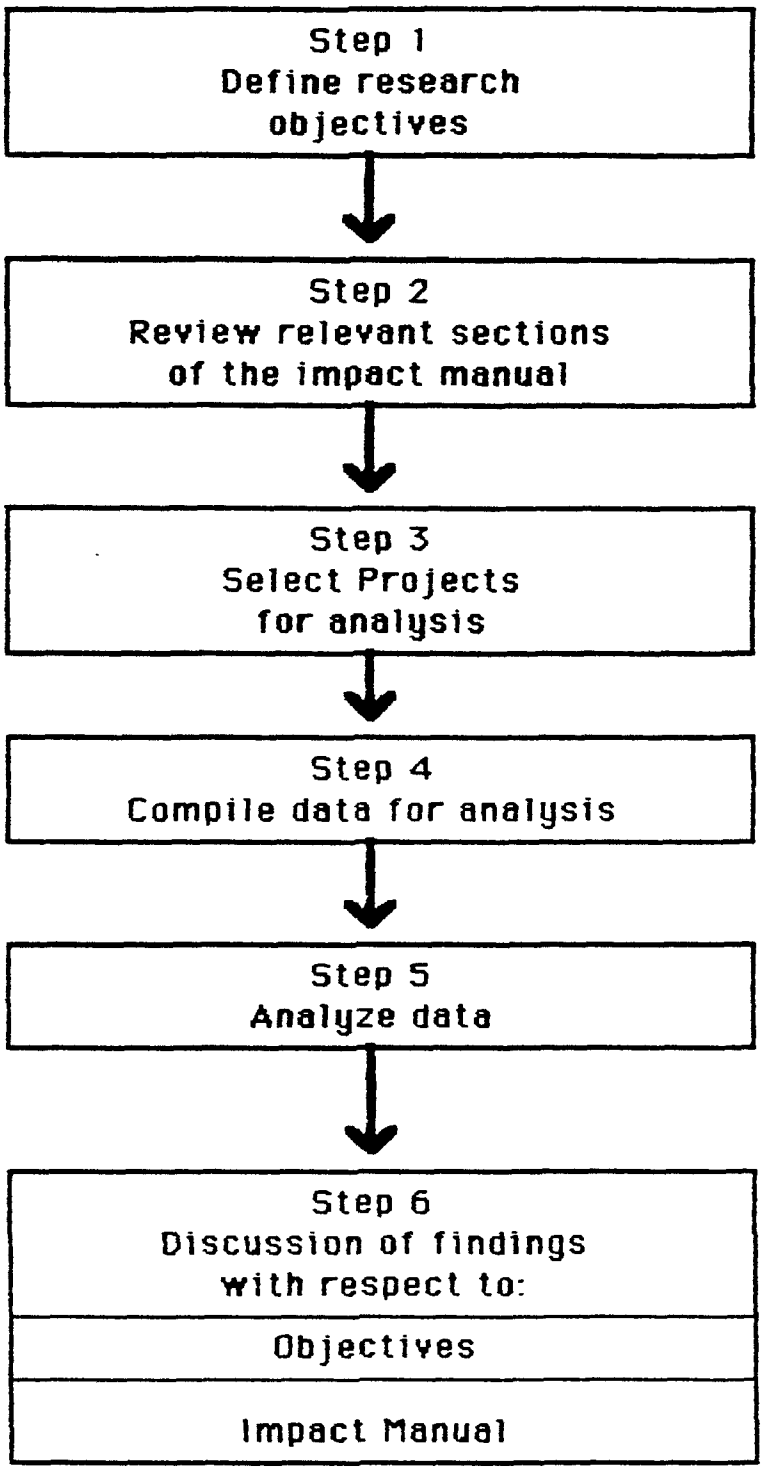
Population projections are extrapolated under the assumption that past population dynamics continue. Most estimates appear to be based on this type of assumption.

The rate of population change from 1970 census counts was determined for each project included in this evaluation. These estimated rates of change in population size were recorded as decimal values to establish a linear trend line for each project which can be compared with the actual 1980 population figures.

Census of population counts are available for a number of geographic units. Geographically, the units are state, county, county subdivision, places (incorporated places, e.g., cities, boroughs, towns, villages, and the like; census designated places; and extended cities), urbanized areas, standard metropol-

FIGURE III-1

Research Flow Chart



itan statistical areas, and standard consolidated statistical areas. For the purposes of this research, the census "place" level seems most appropriate. There are approximately 23,000 census designated places in the United States. This includes all incorporated geopolitical units; those unincorporated densely settled population centers of at least 1,000 persons per square mile. The Census Bureau identifies each place with a number and areaname. The area names, for the most part, correspond with the planning areas identified in the NEPA documents because it is not always the case that the census designated place corresponds geographically with the NEPA planning area. For the purposes of this evaluation it was assumed that they are comparable. Additional time and money to obtain and evaluate the necessary census units, census tract level, and NEPA documentation outlining the exact planning areas for several hundred projects (estimated at 175 labor hours and 1.5 months duration) was not provided.

Printed and machine readable census data were examined. The printed census documentation is not available for all places and where place statistics are available they are very limited in number. On the other hand, the census summary tape file (STF) 3A contains 150 tables of information for every census place in the country. This source provided the basis for comparative analysis.

Identification of Projects to be Examined

Project selection consisted of a survey of NEPA documents, the selection of a sample of these documents and the comparable identification of NEPA project areas with census places. The selection of NEPA documents was pursued in the following manner as defined in the Manual.

1. A listing of all available NEPA documents from Region V was generated from the Grants Information and Control System (GICS). The only condition limiting this search was that the projects had to be dated prior to 1980. This produced a base listing of 1,210 projects.

2. A 50% random sample was selected from this listing in order to make the data handling more efficient. The sample size (605) was determined to be sufficiently large to insure applicability to Region V.

3. A search was then conducted of EPA Region V files to obtain the 605 NEPA documents. After an extensive search, 234 of the projects were found to have documentation consistent with Step 4, below. In many situations, some facilities plan environmental review information had not been transferred to the NEPA document.

4. The following data was then collected for each project from the NEPA documents:

   - Current population (as of the NEPA document),
   - Design population,
   - Location of affected planning area,
   - Rates of expected population growth,
   - EPA facility number, and
   - Consultant name.

   These data were not fully available for an additional 37 projects. This reduced the sample to be analyzed to 197.

5. Finally, the locations of seven of the candidate projects as indicated in the NEPA documents, did not correspond by name to the names of places as defined in the census STF3A file, further reducing the sample size to 190.

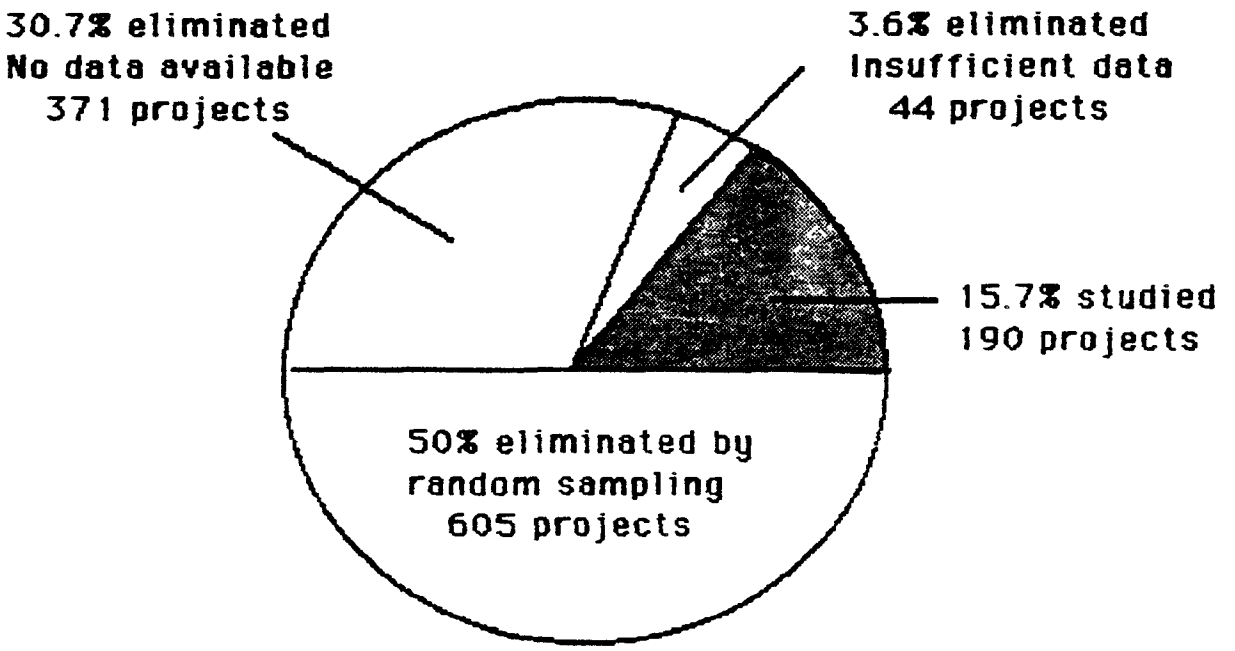
Figure III-2 depicts the project selection process. Figure III-3 depicts the distribution of selected projects by county.

Compilation of Data

Data gathering in this evaluation required knowledge of locating and manipulating computer files. The STF3A file is a large data base on computer tapes located at the main EPA computer facility at Research Triangle Park, North Carolina (RTP). A micro computer, Apple III, was used as a remote terminal by means

FIGURE III-2

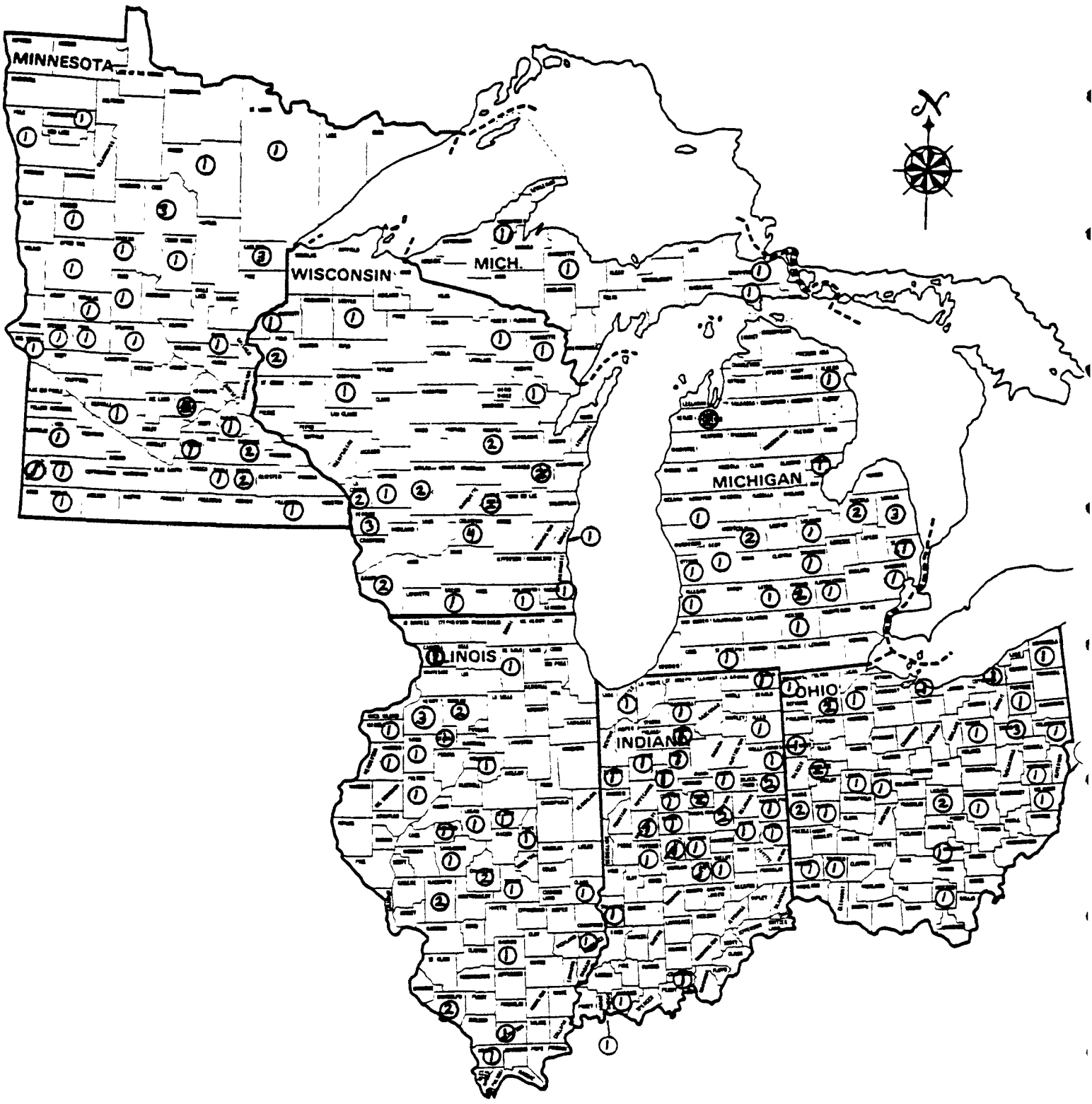
Project Selection for Population Projection Analysis



1210 Construction Grants Projects

FIGURE III-3

LOCATIONS OF PROJECTS BY COUNTY



O - indicates number of projects per County.

of telecommunication software, Access II. TYMNET lines were used to facilitate a local call connection with the IBM system at RTP.

In order to create a data base or a working file of population by places, two additional computer programs had to be merged. SCADS (SAS Census Access and Display System) is an intermediary computer program that converts STF3A into a format for the Statistical Analysis System (SAS). SAS is a computerized filing program that assists large volume data analysis. The basic SAS options provide tools for information storage and retrieval, data modification and programming, report writing, statistical analysis, and file handling. Overall SAS is a data management system for machine readable data.

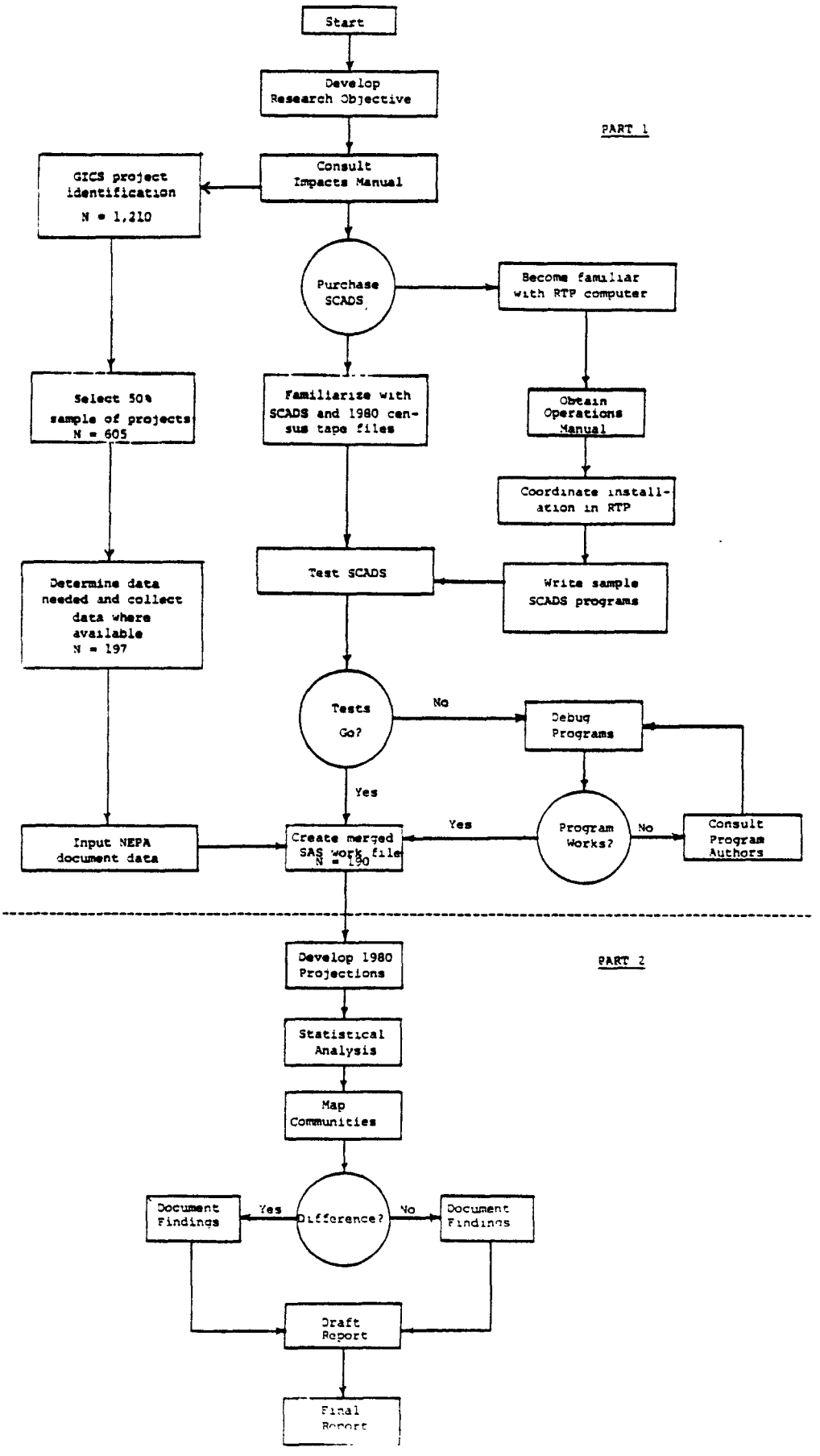
The Study Plan Flow chart is presentd in Figure III-4. The Study Plan is divided into two distinct parts. Part 1 is the initiation phase of the study wherein the purchase and installation of SCADS took place. SCADS was not available for use prior to the start of this project. It had to be purchased and installed at RTP as part of the allocated time provided in this prototype evaluation. In addition, 1980 summary tape files were accessed and SAS work files were created. Two sets of data were merged in the last step of Part 1. These were the data derived from the written NEPA documents and the 1980 census data. The merged data set represented the data base for subsequent analysis. Since demographic base information was available for the STF3A file beyond the single population counts, the merged file contained the following additional demographic items.

- Total population for the area,
- Occupanying status of year-round housing units,
- Source of water for year-round housing units, and
- Sewage disposal for year-round housing units.

These items were used to generate a demographic profile for the communities under study. Part 2 illustrates the actual procedures of statistical analysis concluding in the preparation of this report.

STUDY PLAN FLOW CHART

FIGURE III-4



Evaluation of Data

The first phase of the analysis was to generate a predicted 1980 population for each planning area identified. These were computed using the base year, 1970 population, incremented by the rate of growth given in the NEPA document to achieve the projected population for 1980 (PROJ80). The actual population in 1980 is represented by the code T1I1. This code represents Table 1, Cell 1 in the STF3A data file. Note, the SCADS program generates variables for each cell of each table in the STF files using this same coding system.

Analysis was conducted on two levels:

- Region V as a whole, and
- States within Region V.

The first analysis on the region level was to determine if there was a significant difference between the actual 1980 population and the projected 1980 population. A paired T-test was used to compare the mean population projected for the 190 CG projects selected and the actual mean population for these planning areas based on the 1980 census. The T-test resulted in a T score of -.70 which had a probability of .49. This would indicate that the difference between the projected and the actual population was not statistically significant. A probability of .05 or smaller would have been required to indicate a significant difference. The average difference in the projected and actual figures was 1,968 fewer persons. This would indicate that the projected figures slightly underestimated the population in 1980, but, as indicated by the T score this difference does not exceed the range of sampling error.

While this finding would suggest that the projected and actual population figures are reasonably in line with one another, the average difference between the actual population and the projected population was 16.5%. This percentage difference suggests that a comparison of the percentage difference between the pro-

jected and actual figures for individual projects would be useful.

The percent of difference (PERDIF) was calculated for each place and a test was conducted to see if the rate of error or percent of difference was significantly different from zero. This test resulted in a T score of 4.57 which was significant at the .0001 level. The average difference was 17%. This approach emphasizes the percentage by which the projected population missed the actual figure for each project while the first analysis emphasized the amount of difference between the two population figures. Note in the table below developed for illustrative purposes, that the difference in the average population values is 2,875 which represents a 10.5% error from the Actual average population figures. The error is largely due to discrepancies for Places A, B, and C, while being reasonably accurate for Place D. A comparison of the percentages yields an average percent difference of 38% which indicates substantial inaccuracy while the mean difference or error was only 10.5% from the actual figures.

	Projected Population	Actual Population	Difference	Percent Difference
Place A	10,000	5,000	5,000	50%
Place B	10,000	5,000	5,000	50%
Place C	1,000	500	500	50%
Place D	100,000	99,000	1,000	1%
Total	121,000	109,500	11,500	151%
Mean*	30,250	27,375	2,875**	38%***

* Total divided by 4.

** This difference is equivalent to 10.5% of the actual population mean (percent difference of the means).

*** The mean of the percent differences.

In summary, the regional analysis leads us to conclude that there is a great degree of variability in the accuracy of prediction and the overall percentage difference is not acceptable. A difference of 10% might be considered reasonable especially given the number of small areas involved, but a 17% difference might not be accepable. This finding, however, should be viewed with some caution. Some large percentage differences appear to be due to errors in the data. An examination of the census bureau's 1975 middle series Population Projections (see Appendix B, Table B-10) reveals that their state level projections are within two percentage points of the actual 1980 populations for this region. It should also be noted that the 1980 census count data may be somewhat off the true figures due to non-sampling data handling errors. Ideally, it would be useful to simply compare the rates of change projected for EPA sites with the rates of change found by a comparison of 1970 and 1980 population size for comparable areas rather than comparing projected counts with actual counts.

A similar analysis was conducted at the state level. The demographic profile data for the region and the states is presented in Appendix B, Tables B-8 to B-10. Note that these data are based on the 190 places being analyzed in this research. No demographics, other than those in Tables B-7, B-8, and B-9 (Appendix B), were provided for; occupying status of year-round housing units, source of water for year-round housing units and sewage disposal for year-round housing units. The states with the smallest number of occupied housing units are Minnesota and Illinois, while the Ohio and Indiana sites have some rather populous areas included in the research. The comparison of means for each state is presented below.

	# of Sites	Difference in Means	+T	Probability
Illinois	30	-157	-0.56	.58
Indiana	32	-15441	-0.93	.36
Michigan	27	24	.02	.99
Minnesota	36	-7	-0.15	.88
Ohio	31	2555	1.09	.28
Wisconsin	34	1331	2.09	.04

Note that only one state, Wisconsin, has a significant difference between the projected mean population and the actual mean population for the places studied. Also note that the largest difference in means is in Indiana. The reason the Indiana difference in means is not significant lies in the overall variability of the mean differences in Indiana. The standard error for the estimate is 16,555 in Indiana in contrast to only 637 in Wisconsin.

The percentage by which the projected and actual population were different is presented below for each state.

	# of Sites	Average Percentage	+T	Probability
Illinois	30	.96	.22	.82
Indiana	32	16.80	2.08	.05
Michigan	27	30.72	2.11	.05
Minnesota	36	.46	.13	.89
Ohio	31	33.27	3.11	.00
Wisconsin	34	26.10	2.31	.03

Note that there is a great deal of variability in the accuracy of the projections amoung the states. Illinois and Minnesota appear to be accurate on the average while the other four states appear to be very inaccurate. These differences in accuracy may be due

to the fact that rural area projects and stable populations make projections relatively simple while states with unstable population dynamics are difficult to estimate population change, or, these differences may be due to the sample of projects selected as a prototypical exercise rather than a full-scale study. As noted above, the projects in Illinois and Minnesota were located in smaller more rural places while projects in the other states included some large cities.

Appendix B contains a listing of the projected (PROJ80) and actual (T1I1) 1980 population values for each planning area. This listing provided the basis for determining the statistics provided above.

Findings of Analysis

Two findings can be concluded from this analysis. First, the regional level of accuracy appears to be good in terms of actual size comparisons. The aggregate mean difference is not great. Secondly, the average percentage error in the Region and particularly in four states, Indiana, Michigan, Ohio, and Wisconsin, is quite large when compared to the accuracy of census projections. This may indicate a greater need to monitor and evaluate the development of population projections in these states. Greater attention should be used in defining the NEPA areas so as to correspond directly (or as close as possible) with comparative data resources that permit long-term monitoring and evaluation, i.e., secondary resources such as census designations. If there is a need to retrieve other files for comparative analysis (e.g., geographics), combining computerized data bases without a uniform system of long-term measurement will prove much more costly and time consuming to evaluate accuracy at the the environmental issues level.

PROTOTYPE REPORT
IMPACTS ON LAND USE PLANS

Purpose

The purpose of this evaluation was to determine the accuracy with which National Environmental Policy Act (NEPA) process assessed the impact of Construction Grants (CG) projects on land use plans, and, thus, the effectiveness of NEPA in preventing adverse impacts. The procedure used herein is described in EPA's Manual for Evaluating Predicted and Actual Impacts of Construction Grants Projects.

The following sections of this report document the specific steps carried out by the study teams (original study team and the edit/revise study team) from the definition of project elements through the findings. Certain assumptions made by one or the other team are discussed.

As an aid to reviewers, the general procedural steps used by the original study team in this analysis are shown in Figure IV-1.

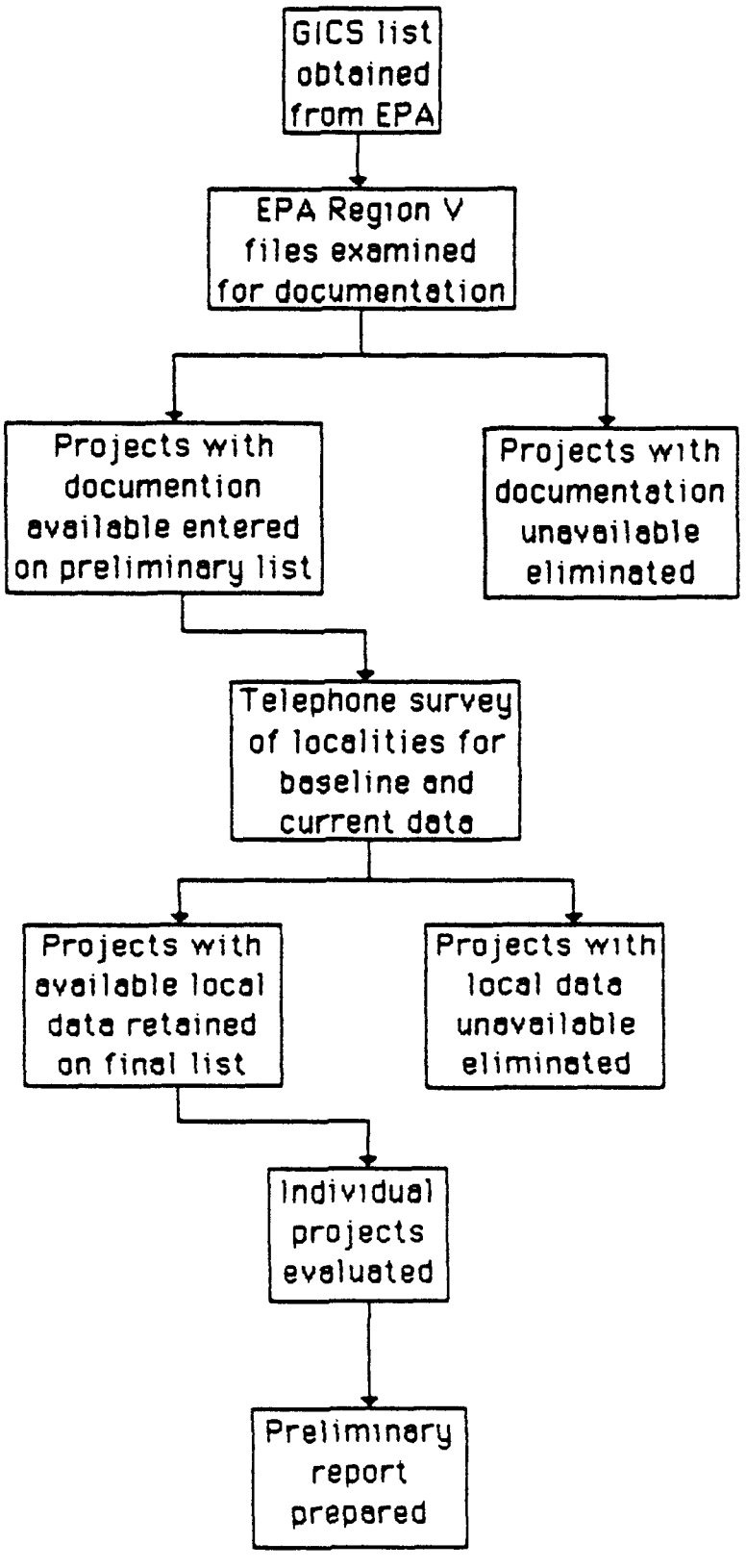
It should be noted, at this point, that EPA reviewers and the edit/review study team had substantial misgivings concerning the original study team's efforts in this evaluation. The procedures employed casted serious doubt on the credibility of the original study team's findings and conclusions. Since a prime objective of the prototype reports was to document an actual use of the Manual as a learning experience, the original study team's procedural approach is presented in the following sections. The conclusions section of this report then critiques the original evaluation, pointing out its weaknesses and provides a procedure which could have resulted in a much more adequate study.

Definition of Project Elements

The issue examined in this evaluation was the accuracy of NEPA predicted impacts on land use plans resulting from the construction of wastewater transport or treatment facilities. Of speci-

FIGURE IV-1

Decision Tree
Changes in Baseline for Land Use Plans



fic importance were changes in land use plans which would accommodate new development not originally planned for but made possible by a Construction Grants project. This can be viewed as unanticipated secondary development. The ramifications of such an occurrence can be substantial due to the environmental impacts of unanticipated secondary development particularly if such development occurred indiscriminately or in environmentally sensitive areas.

Identification of Projects to be Examined

The initial list of projects to be examined was derived from EPA's Grants Information and Control System (GICS). The system was asked by the original study team to generate a list of Region V Construction Grants projects which provided for increased treatment plant or interceptor capacity and which were greater than 50 percent completed. A total of 152 grant numbers (including sequence numbers) were identified as meeting these criteria. A review of the GICS listing revealed that, in many cases, several grant numbers were listed for a single applicant. For example, the City of Chicago had eight of the 152 grant numbers and the City of Detroit had 18 grant numbers listed. In such cases, it was assumed that the multiple grant numbers were for different parts of the same Construction Grants project. Thus, the list of 152 grant numbers represented 92 initial candidate projects.

A search of EPA's manual Environmental Assessment (EA) files was conducted to obtain written documentation on the candidate projects. NEPA documents were obtained for 36 of the projects. The 56 projects for which documents were not available in the EA files were eliminated from further consideration in this analysis by the original study team.

The edit/review study team assumed that the original study team could have obtained additional planning documents from either the applicants or the consultants, however, time schedule and budget constraints did not allow for this. It is estimated that an attempt to obtain documentation on the eliminated 56 projects

would have required at least 100 man-hours over a 4 to 6 week period and still would have been only partially successful.

The final step in the identification of projects to be examined in this study resulted from a telephone survey. As in the previous step, the ready availability of data was the criterion. The objective of the telephone survey was to identify and contact the local agency and specific personnel who could supply information or documentation concerning the baseline and current land use plans and to determine the availability of this data. A limit of one hour per project was established by the original study team as the maximum time to accomplish this task for 36 projects within the time and budget constraints.

It was determined that land use plan data for 20 of the 36 candidate projects could not be obtained for one of the following reasons: (a) the data were unavailable at the local level, (b) no knowledgeable local contact could be identified, or (c) the knowledgeable local contact was not available during the time frame of this study. Also, one project was eliminated because it did not meet the original criterion of the study which was to provide increased system capacity. Thus, the remaining 15 candidate projects became the subject of this evaluation of Construction Grants project impacts to land use plans. These are listed in Table IV-1, and their approximate locations in Region V are shown in Figure IV-2. The project identification process carried out by the original study team is summarized in Figure IV-3.

Compilation of Data

The collection and compilation of data was carried out simultaneously with the identification of projects to be examined. This occurred because the major factor which eliminated projects from the study was the availability of data.

The initial step in the collection and compilation of data was a search of EPA's manual EA files to obtain NEPA documents. The EA files yielded documentation for 36 of the 92 projects. Portions of these documents which summarize the expected impacts are contained in Appendix C. The expected impacts on land use plans and

TABLE VI-1

CG PROJECTS GREATER THAN 50% CONSTRUCTED, PROVIDING INCREASED CAPACITY, AND WITH READILY AVAILABLE NEPA DOCUMENTATION AND CURRENT LAND USE PLAN DATA

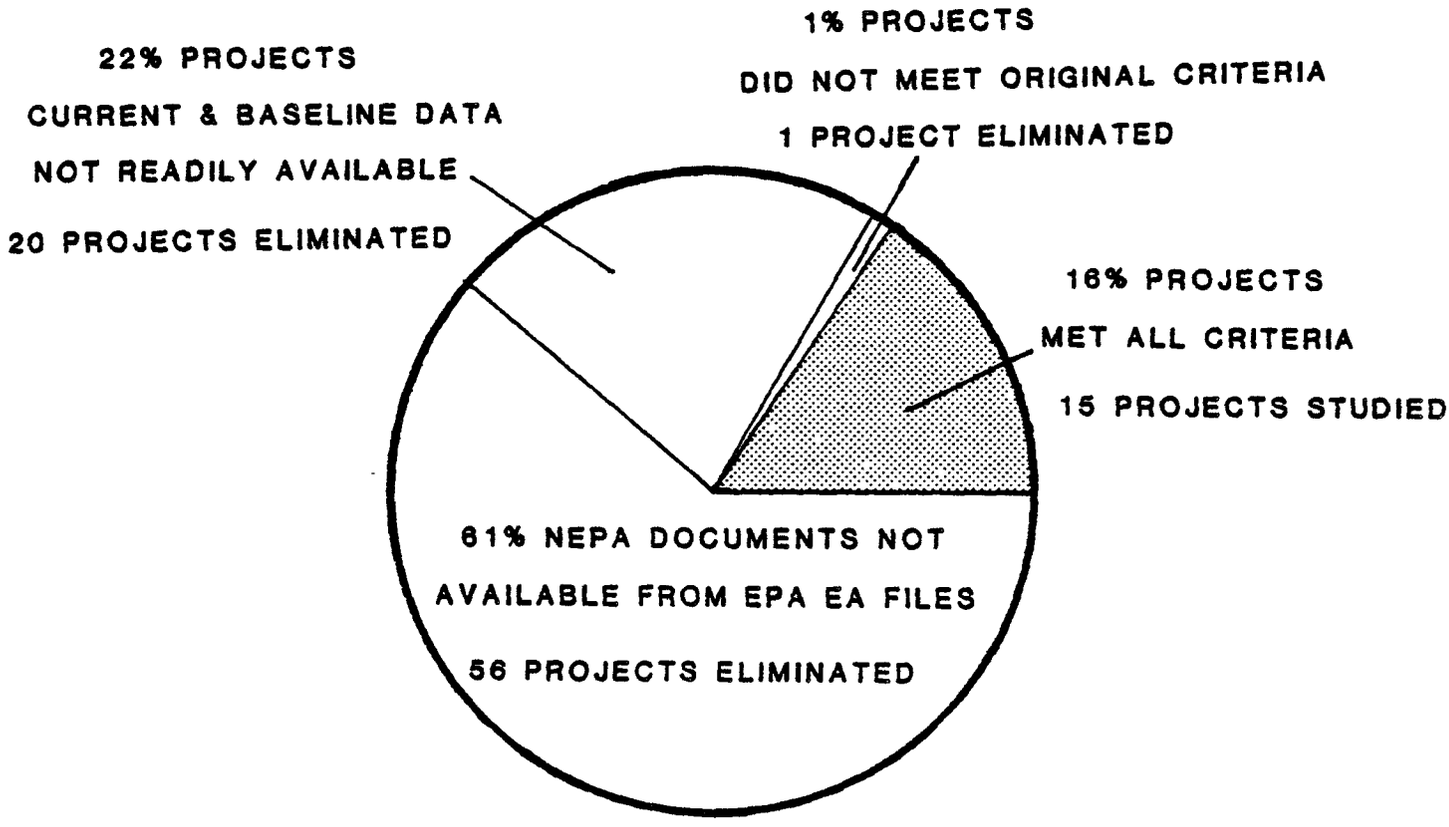
State	Applicant Name	Grant No.
Illinois	DeKalb Sanitary District	171334-03
Illinois	City of Moline	171118-01
Illinois	Springfield Sanitary Dist.	171807-05
Illinois	Urbana Champaign San. Dist.	171568-03
Indiana	City of Bloomington	180560-03
Indiana	City of Huntington	180396-03
Indiana	City of New Castle	180490-02
Michigan	City of Grand Rapids	262654-08
Michigan	City of Kalamazoo	262583-03
Minnesota	City of Rochester	270804-03
Minnesota	City of Saint Cloud	270747-01
Ohio	City of Canton	390622-01
Ohio	City of Kent	391002-03
Ohio	City of Sandusky	391117-02
Wisconsin	City of Eau Claire	550628-03

FIGURE IV-2

PROJECT LOCATIONS
for
Land Use Plans
Analysis

FIGURE IV-3

Project Identification Process Impacts on Land Use Plans



TOTAL OF 92 CG PROJECTS HAVING INCREASED TREATMENT OR COLLECTION SYSTEM CAPACITY

NOTE: Only EPA's files were reviewed. EA files are also maintained at states in Region V. EPA files, where construction and final audits are complete, may be warehoused.

other data were summarized on evaluation forms also contained in Appendix C. Had sufficient time and budget been available, the original study team could have obtained planning documentation for additional projects directly from the applicants or their consultants.

The final step in the compilation of data involved a telephone survey regarding the 36 candidate projects. It was first necessary to locate and identify a person having access to and knowledge of past and current land use plans. This only happened for the 15 selected projects. Next, certain specific information was obtained. The telephone survey respondent was asked:

1. Has the applicable land use plan been modified since the NEPA decision?

2. If yes, was the modification major or minor?

3. Were any changes in the land use plan influenced by the Construction Grants project?

Table IV-2 summarizes the results of the original study team's telephone survey. Those projects highlighted were selected for further analysis.

In accordance with the general procedures outlined in the Manual for for Evaluating Predicted and Actual Impacts of Construction Grants Projects, the following steps were carried out by the original study team:

1. The NEPA documents for each of the projects were reviewed and the predicted impacts on land use plans were recorded on an evaluation form.

2. Where the NEPA document did not specifically predict an impact on the land use plan, it was assumed that a "no impact" prediction was intended.

3. From the telephone survey, the actual changes in

TABLE IV-2

SUMMARY OF NEPA DOCUMENT AND TELEPHONE SURVEY DATA

Project Location and Facility Number	Description of Project	Year Construction Completed	Did Land Use Change?	Was Land Use Change Due to CB Project?	Was Change Major or Minor?	Was Land Use Plan Change Predicted?	Source
Aurora, Illinois 17065400!	Treatment Plant Expansion	1984	DNA	DNA	DNA	N/A	
Carpentersville, Illinois 17064800!	Treatment Plant & Interceptor Expansion	1978	DNA	DNA	DNA	N/A	
✪ DeKalb, Illinois 17018500!	Interceptor Capacity Expansion	1981	No	N/A	N/A	No	DeKalb Planning Dept.
Glen Ellyn, Illinois 17071500!	Treatment Plant & Interceptor Expansion	1981	DNA	DNA	DNA	N/A	
✪ Moline, Illinois 17033800!	Treatment Plant Expansion	1978	No	N/A	N/A	No	Moline City Planning Office
Sauget, Illinois 17025500!	Treatment Plant Expansion	(50% Constructed)	DNA	DNA	DNA	N/A	
✪ Springfield, Illinois 17040200!	Interceptor Capacity Expansion	1981	No	N/A	N/A	No	Springfield Planning Department
✪ Urbana-Champaign, Illinois 17011200!	Treatment Plant Expansion	1982	Yes	No	Major	No	Champaign-Urbana Regional Planning Comm.
✪ Bloomington, Indiana 18020003	Treatment Plant Expansion	1983	No	N/A	N/A	No	Bloomington Planning Dept. & Monroe County Planning Commission
Carmel, Indiana 18001500!	Treatment Plant Expansion	(90% Constructed)	DNA	DNA	DNA	N/A	
Gas City, Indiana 18453500!	Interceptor Capacity Expansion	1983	DNA	DNA	DNA	N/A	
✪ Huntington, Indiana 18209000!	Treatment Plant & Interceptor Expansion	1982	No	N/A	N/A	No	Huntington Planning Director

DNA - Data Not Available.
N/A - Not Applicable.
✪ - Selected for further analysis.

TABLE IV-2
(Continued)

Project Location and Facility Number	Description of Project	Year Construction Completed	Did Land Use Change?	Was Land Use Change Due to CG Project?	Was Change Major or Minor?	Was Land Use Plan Change Predicted?	Source
● New Castle, Indiana 182160001	Interceptor Capacity Expansion	1981	No	N/A	N/A	No	New Castle Planning Commission Staff
● Grand Rapids, Michigan 260313001	Interceptor Capacity Expansion	1982	No	N/A	N/A	No	Grand Rapids Planning Department
Ishpeming, Michigan 262014001	Treatment Plant & Interceptor Capacity	1981	DNA	DNA	DNA	N/A	
● Kalamazoo, Michigan 260108001	Treatment Plant Expansion	1980	No	N/A	N/A	No	Kalamazoo Planning Department
Lansing, Michigan 260032001	Treatment Plant Expansion	(50% Constructed)	DNA	DNA	DNA	N/A	
Monroe, Michigan 260800001	Treatment Plant Expansion	1978	DNA	DNA	DNA	N/A	
St. Johns, Michigan 260007001	Treatment Plant Expansion	1983	DNA	DNA	DNA	N/A	
Ypsilanti, Michigan 260725001	Treatment Plant & Interceptor Capacity	1983	DNA	DNA	DNA	N/A	
Moorhead, Minnesota 270032001	Treatment Plant & Interceptor Capacity	1983	DNA	DNA	DNA	N/A	
● Rochester, Minnesota 270045001	Treatment Plant Expansion	1983	No	N/A	N/A	No	City of Rochester Planning Department
● St. Cloud, Minnesota 270045001	Interceptor Capacity Expansion	1977	No	N/A	N/A	No	St. Cloud Planning Department
Batavia, Ohio 391660008	Interceptor Capacity Expansion	1979	DNA	DNA	DNA	N/A	

DNA - Data Not Available.
N/A - Not Applicable.
● - Selected for further analysis.

TABLE IV-2
(Continued)

Project Location and Facility Number	Description of Project	Year Construction Completed	Did Land Use Change?	Was Land Use Change Due to CG Project?	Was Change Major or Minor?	Was Land Use Plan Change Predicted?	Source
● Canton, Ohio 391323001	Interceptor Capacity Expansion	1981	No	N/A	N/A	No	Canton Planning Office
● Kent, Ohio 394023001	Treatment Plant Expansion	(80% Constructed)	No	N/A	N/A	No	Kent Planning Dept.
Lakewood, Ohio 394243001	Treatment Plant Expansion	(90% Constructed)	DNA	DNA	DNA	N/A	
Oregon, Ohio 396398001	Interceptor Capacity Expansion	1981	DNA	DNA	DNA	N/A	
Painesville, Ohio 396398001	Treatment Plant Expansion	1980	DNA	DNA	DNA	N/A	
● Sandusky, Ohio 397413001	Treatment Plant Expansion	1979	No	N/A	N/A	No	Sandusky Planning Dept.
Steubenville, Ohio 397910001	Treatment Plant Expansion	1980	DNA	DNA	DNA	N/A	
Antigo, Wisconsin 550160001	Treatment Plant & Interceptor Expansion	1981	DNA	DNA	DNA	N/A	
DePere, Wisconsin 551330001	Interceptor Capacity Expansion	1981	DNA	DNA	DNA	N/A	
● Eau Claire, Wisconsin 551470001	Treatment Plant & Interceptor Capacity	1985	No	N/A	N/A	No	Eau Claire Planning Department
West Bend, Wisconsin 555170001	Treatment Plant Expansion	1981	DNA	DNA	DNA	N/A	

DNA - Data Not Available.
N/A - Not Applicable.
● - Selected for further analysis.

land use plans was determined and recorded on the evaluation forms. Where a change had occurred, the magnitude of change (i.e., minor or major) and whether or not the change was significantly affected by the CG project was strictly the opinion of the survey respondent and no attempt was made to verify or quantify the information obtained.

Evaluation of Data

The actual impacts to land use plans ("after" project condition) were compared to the impacts predicted in the NEPA documents (or assumed where no NEPA prediction was made) as specified in the general procedures outlined in the Manual. This comparison provided the original study team's basis for an aggregate analysis of the impact of CG projects on land use plans.

Findings of Analysis

Based on an analysis of the data contained in Table IV-2, 14 of 15 CG projects evaluated showed that no changes in land use plans had occurred. Also, in the one case where no impacts were predicted but major changes had actually occurred, it was the survey respondent's opinion that the changes were not substantially influenced by the CG project. Thus, it was concluded by the original study team that CG projects have had no impact on land use plans.

Conclusions

It should be noted that the majority of projects analyzed were completed since 1981, and all have been completed since 1977. Also, of the 14 projects where "no changes" had occurred, it was stated by respondents that in all cases land use plans were in need of updating. It is possible that given the infrequency with which land use plans are updated and changed (which is a reflection of the need versus the priority at the local level) less than 4 to 7 years simply may not be enough time for potential impacts to manifest themselves in terms of a major change in the

land use plan. Also, the list of projects analyzed did not include any large metropolitan area (i.e., Chicago, Detroit, Milwaukee, Indianapolis, Columbus). Thus, the results may not be representative of these areas.

The analysis shows that impacts to land use plans from CG projects were correctly predicted (as "no impact") in every selected project. Within the limitations with which these projects represent the original 92 candidate projects, these results could be generalized to include them. The edit and review study team, however, had substantial misgivings concerning the conduct of this evaluation by the original study team which casts serious doubt on the credibility of the findings. Thus, conclusions regarding the utility of land use plans for this type of analysis cannot be made with confidence at this time.

The edit and review study team has developed several conclusions regarding the overall approach of this evaluation by the original study team. So many errors in good evaluation technique were made that this Prototype Report better represents an example of how <u>not</u> to conduct an evaluation rather than the opposite. It should be noted that an attempt was made to edit and revise this Report, but an almost complete lack of documentation precluded the effort from acheiving the desired goal. Since available time would not allow a total reanalysis, this section will provide the reader with a description of how the evaluation might have been conducted to provide more meaningful and credible results.

The work order for this report specified four basic tasks with suggested relative levels of effort:

1. Identify a representative sample (2%).
2. Collect and compile data (16%).
3. Map the location of projects analyzed (2%).
4. Use the Manual to prepare an in-depth analysis of projects having extensive land use plan changes and contrast them with projects showing minor or no changes (80%).

As its name implies, the Manual basically provides procedures for evaluating the accuracy of NEPA predicted impacts of Construction Grants projects. The socioeconomics chapter deals with land use issues, but not land use plans. It is believed that the inexperience of the original study team did not permit an adequate transition from the Manual to Task 4 above. Thus, instead of an "in-depth analysis of the projects...", the definition of Project Elements was incorrectly perceived as an evaluation of the accuracy of predictions of impacts on land use plans.

Two conclusions were drawn from this:

1. The user of the Manual should be knowledgeable in the subject area being studied and in basic research technique which includes organizing files and thoroughly documenting the procedural steps employed.

2. The Manual is designed for determining the accuracy of NEPA impact predictions. It contains no procedures for preparing an "in-depth analysis of projects" having different characteristics. Although the Manual can assist a researcher with such a task (i.e., data collection, data compilation, various evaluations of the data), objectives which are beyond the limits of the Manual should be accompanied by additional procedures; general or specific depending upon the experience of the researcher.

Assuming the objectives of the study were as stated in Tasks 1 through 4 above, the use of GICS to identify the 92 candidate projects was appropriate.

With respect to the next step, Compilation of Data, the original study team failed to collect adequate NEPA documentation in terms of both number of projects and amount of data. They, also, failed to document and catalog properly the data that was obtained. Thus, it is concluded that:

3. Data collection is an important effort but can be very time consuming and labor intensive. Where the objective of the study relies on an analysis of comprehensive data

from some minimum number of projects, an accurate estimate of the data collection effort should be derived before establishing a budget limit for this task. In this case, full NEPA documentation should have been obtained from consulting engineers or applicants as well as from EPA files, and current land use planning data should have included changes in zoning as well as land use plans. It is quite possible that in many cases a trip to the appropriate planning or zoning agency would have been necessary to obtain and properly verify the required data. Also, large metropolitan cities as well as the medium and small cities should have been represented in the projects analyzed.

4. Comprehensive data collection on many projects require organization, a filing system, and written documentation of data gathered verbally. In this project, data to facilitate an in-depth analysis could have included any or all of the following:

Name	GICS Transaction #
Applicant's state	13-A
Cumulative EPA funds awarded	19-B
Project description	20-A
Population served	45-B
Industrial flow capacity	49-B
New project or expansion project	56-A
Total flow capacity	99-A
Construction start date	MO-D
Project completion date	N5-B
NEPA decision data	from NEPA document

The analysis of data by the original study team concentrated on the objective of the Manual; to determine the accuracy of NEPA impact predictions, in this case, land use plans. However, the intended objective was to identify a group of projects characterized by extensive changes in their land use plans (or zoning) and contrast these with projects having minor or no changes. Conclusions 1 and 2 also apply here.

Assuming all necessary data had been obtained and computerized for a larger selection of projects, a suitable analytical procedure might have been carried out as follows:

1. Define the terms "major" and "minor" changes. This could be done as an absolute value (i.e., major change = changes in land use plan or zoning greater than 640 acres). It could also be defined in terms of a relative value (i.e., major change = change in land use plan or zoning greater than 20% of planning area). Finally, it is possible that "major" and "minor" changes would best be defined for each project on a case by case basis.

2. Compile the lists of projects with major changes, minor changes, and no change.

3. Using the computer, analyze and contrast the lists of projects and apply appropriate statistics to determine significance. Some of the analyses which might be conducted are as follows:

- Have major changes in land use plans or zoning occurred at a significantly higher rate in some states than in others?

- Have major changes in plans occurred at a significantly higher rate where interceptor capacity has been expanded as opposed to projects where plant capacity has been expanded?

- Have major changes in plans occurred at a higher rate among new projects or expansion projects?

- Have major changes in plans occurred at a significantly higher rate for projects with total flow capacity greater than 1.0 mgd as opposed to those less than 1.0 mgd?

- Have major changes in plans occurred at a significantly higher rate for projects where the NEPA decision occurred before 1977 as opposed to those after 1977?

- For all selected projects, contrast the change (major, minor or no change) against the project completion dates, population served or any of several other parameters.

4. From the analysis of data, draw appropriate conclusions and generalize these to the extent possible to the total number of Region V projects meeting the original project criteria.

5. Prepare a report containing a liberal use of graphics explaining the analytical procedure, the findings, conclusions and generalizations. This should include a discussion of all assumptions and an appendix containing all pertinent documentation.

In summary, this project required a more experienced study team, more knowledgeable in socioeconomic issues, research techniques, and statistics. The data collection and compilation effort was insufficient and should have included contact with applicants and consulting engineers. Site visits to planning and/or zoning agencies should have been made where necessary to obtain and verify current status information. Finally, the procedural steps employed should have been geared toward the four basic tasks stated in the work order.

A broader question emerges from this evaluation: Are changes in land use plans an appropriate measure of impact accuracy and aggregate analysis of NEPA effectiveness? There are several reasons which point to an answer of "no". For example, there are many other factors aside from wastewater infrastructure that can elicit land use plan changes. Among these are zoning, zoning variances, transportation, employment, etc. Also, a land use plan in place during facilities planning may have been previously changed in anticipation of a WWTP. A more appropriate level for such an analysis might be the county or regional land use plans

which are consistent with the Areawide Waste Management Planning (208 Plans) for the selected project areas. Also, perhaps NEPA documents should reflect specific portions of the applicable "208" plans.

PROTOTYPE REPORT
EVALUATION OF TWO COMPLETED NEPA DOCUMENTS

Purpose

The purpose of this evaluation was to determine the accuracy with which National Environmental Policy Act (NEPA) planning documents assessed the impact of two specific Construction Grants (CG) projects. The procedure used herein is described in EPA's Manual for Evaluating Predicted and Actual Impacts of Construction Grants Projects, dated January 1985.

The following sections of this report document the specific steps carried out by the study teams (original study team and the edit/revise study team defined on page I-2) from the definition of project elements through the findings. Certain assumptions made by one or the other team are discussed.

Definition of Project Elements

A broad evaluation of CG projects was conducted by USEPA, Region V, to select projects which when implemented, resulted in a diversity of impacts. This Prototype Report represents the use of the Manual's methodology to evaluate the entire spectrum of NEPA predicted impacts for two specific projects. Impacts which have been evaluated include: water quality, land use changes, biota, flow augmentation, visual impacts, traffic, construction impacts, inter-related/other impacts, unresolved issues and grant conditions.

Completion of the evaluation of the two NEPA projects required the coordination of numerous interviews and discussions between the contractor (study teams) and EPA employees. The coordination required after each initial data gathering consumed approximately 10-15% of the total project evaluation time. Without the involvement of the EPA resource persons, it is doubtful that the products would reflect the NEPA decision-making process.

Identification of Projects to be Examined

Two projects were selected by EPA Region V which represented the spectrum of NEPA decision-making. The Bloomington, Indiana, project was the subject of a complex and detailed draft and final EIS, while the St. Cloud, Minnesota project received a Negative Declaration. Both projects were completed during the same general time period with the final EIS being issued in August, 1976, and the Negative Declaration issued in April, 1976.

A. St. Cloud, Minnesota (EPA Project No. C270807)

Project Description

The St. Cloud PAN Interceptor Sewer project was the subject of a Facilities Plan/Environmental Assessment and Supplemental Environmental Assessment, dated March 1975 and March 1976, respectively. The purpose of the project was to relieve raw sewage discharges (CSO) to the Mississippi River. The selected alternative resulted in the construction of a sanitary interceptor sewer. The project was expected to: (1) improve water quality in the Mississippi River; (2) slightly stimulate land development in the service area; and (3) result in the destruction of trees (mostly American Elms) along the chosen interceptor route. A Negative Declaration was issued on April 16, 1976, by USEPA, Region V. In 1977, final plans and specifications were approved and a NPDES permit was issued.

Compilation of Data

Two primary sources of information were contacted and requested to supply both historical and current documentation. These were USEPA Region V and the Minnesota Pollution Control Agency.

Specific documents obtained were:

1. Environmental Assessment of Proposed PAN Intercepting Sewer dated March 1975.

2. Supplemental Report to the Environmental Assessment on the PAN Intercepting Sewer dated March 1976.

3. USEPA Region V Negative Declaration dated April 16, 1976.

4. Miscellaneous project correspondence.

Data regarding the current conditions were obtained via a site visit by the original study team.

Evaluation of Data

Available data was evaluated with respect to three impact categories identified in the NEPA documents; land use, water quality and biota (terrestrial). Table V-1 summarizes the findings for each of these impact categories.

Findings of Analysis

All NEPA predictions, as summarized in Table V-1, were qualitative relative. Only one of the impact predictions, biota, was based upon documented baseline data. The predictions for water quality and land use were unsupported in the NEPA documentation. The prediction for impacts to biota (trees along interceptor route) were determined to be accurate. No data were collected by the original study team to determine the accuracy of the qualitative predictions for water quality and land use. Appendix D contains the evaluation forms.

Conclusions

The documentation available on the St. Cloud Minnesota PAN Interceptor project, generated by both the grantee and USEPA was lacking in substantive data to support the impact predictions made. Also, the original study team did not follow the procedures outlined in the Manual with respect to the acquisition of baseline data from available historical records where such data is not provided in the NEPA documentation.

A diligent use of the Manual would have resulted in the following additional steps being carried out:

1. Obtain the historical ("before" project) and current ("after" project) water quality data for the Mississippi River, upstream and downstream of St. Cloud from STORET.

2. Determine if the qualitative impact prediction ("improved water quality") was accurate.

TABLE V-1

SUMMARY OF FINDINGS

	IMPACT CATEGORIES		
	Water Quality	Land Use	Terrestrial Biota
NEPA PREDICTION (documentation)	Improved Water Quality (No baseline data to support prediction)	Slight stimulation of land development (No baseline data to support prediction)	Tree removal along interceptor route, mitigation and complete revegetation (tree count undertaken)
CURRENT CONDITION	(Current data presumed available but not obtained)	(Current data presumed available but not obtained)	Revegetation completed based on field observation

3. Obtain "before" project and current or "after" project land use data.

4. Determine if the qualitative impact prediction ("slight stimulation of land development") was accurate.

5. Include the results of these evaluations in the case study report and appendicize the back-up data.

B. Bloomington, Indiana (EPA Project No. C180560)

Project Description

The sewage treatment facilities projects for the South Bloomington and Lake Monroe Service Areas were originally developed in two separate facilities plans. Regionalization was a major consideration and resulted in the consolidated of the two planning areas with the City of Bloomington acting as lead agency. The facilities plans were submitted to EPA as one document with a request for 75 percent federal funding.

The facilities plan recommended construction of a new regional 20 mgd, single stage, complete mix, activated sludge WWTP with sand filtration of effluent at a site located near the confluence of Salt Creek and Clear Creek. Sludge was to be aerobically digested followed by lagooning and disposal by soil injection. The existing WWTP was to be abandoned. The new regional plant was to serve the South Bloomington Service Area (17 mgd) and the Lake Monroe Regional Waste District (3 mgd). Flows from South Bloomington were to be transported to the new plant through a new 50 mgd gravity interceptor constructed along a 13.4 mile route adjacent to Salt Creek.

Following initial review of the facilities plan by EPA, a number of deficiencies were recognized. This led to the issuance of a Notice of Intent to prepare an EIS on May 14, 1975. A Draft EIS was published in March 1976. It examined eleven categories of issues:

1. Regionalization of the two planning areas,
2. The treatment process,
3. Feasibility of renovation and expansion of the existing plant,
4. Plant capacity and location,
5. Trade offs between a Clear Creek site versus the Salt Creek site,
6. Present worth of alternatives,
7. Distribution of costs,

8. Sludge treatment and disposal,
9. Environmental impacts of alternatives,
10. Induced growth around Lake Monroe, and
11. Mitigation of adverse environmental impacts.

The Final EIS was issued in August, 1976. The NEPA process rejected the concept of regionalization, and, thus, recommended facilities for the South Bloomington Service Area only. This eliminated the need for the 13.4 mile interceptor and associated environmental impacts since a site much closer to Bloomington was suitable (the Dillman Road site). Also, since a regionalized plant would not be constructed, the growth and development of the Lake Monroe area induced by easily accessible sewage treatment facilities under the regionalized plan was eliminated. The single service area population was smaller than that under regionalization, therefore, the capacity of the plant was reduced to 15 mgd. Assuming 15 mgd alternatives, the present worth savings of the NEPA site and project over the facilities plan site and project was over $11 million.

The proposed NEPA project was a 15 mgd two-stage activated sludge plant with rapid sand filtration to be constructed at the Dillman Road site. It would serve the South Bloomington Service Area with potential service for Smithville and Sanders. Sludge would be aerobically digested, dewatered by centrifugation, and disposed of in an environmentally acceptable manner in consideration of the potentially excessive PCB and heavy metal concentrations. With the exception of Smithville and Sanders, the remainder of the Lake Monroe District would be adequately served by its existing and proposed local facilities.

Following issuance of the Final EIS, the Army Corps of Engineers raised several concerns regarding the need to relocate approximately 2,000 feet of Clear Creek in order to use the Dillman Road site. As a result, alternative site layouts were investigated. In January, 1977, a supplement to the Final EIS was issued describing a new site configuration at Dillman Road. This new layout not only eliminated the need to relocate Clear Creek, but it also eliminated the need for flood protection, provided better

access, facilitated gravity flow through the plant and resulted in a present worth cost savings of $332,000.

The new recommended NEPA project at the Dillman Road site was expected to result in the following types of impacts:

A. Short-term Construction Related Impacts

1. Destruction of vegetation in interceptor rights-of-way.
2. Disruption of stream bed and banks at four pipe crossings.
3. Stream siltation during site development (five feet of soil over bedrock, 6 to 12% slopes).
4. Minimal impact to railroad traffic at three tunnelled pipe crossings.

B. Long-term Impacts

1. Improved water quality in Clear Creek due to the elimination of the existing (Winston Thomas WWTP) discharge.
2. Continued augmentation of Clear Creek flow by the Dillman Road WWTP and dilution of upstream pollutants.
3. Approximately 10,500 feet of Clear Creek between old WWTP discharge and new WWTP discharge reduced to natural flow rates.
4. Minimal visual impact.
5. Minimal impact on traffic flow.
6. Enhanced recreational opportunity on Clear Creek.
7. No induced growth around Lake Monroe.

C. Other Concerns Requiring Additional Study

1. Determine if chlorine disinfection of effluent would result in the formation of toxic chlorinated organic compounds in concentrations which would present a risk to the environment or human health (Bedford water intake 20 miles downstream).
2. Determine if nitrate in the plant effluent would present a hazard to drinking water supplies downstream (Bedford).

3. Determine the extent of the PCB/heavy metal problem in sludge, take corrective actions as necessary to ensure safe agricultural application, and determine the best application rates for sludge produced at the new plant relative to the different soil types on which it will be applied.

General and specific mitigation techniques were discussed in the EIS. With mitigation, none of the adverse impacts were expected to be substantial.

Construction of the project began in 1978 and the plant became operational in June 1982 with the following effluent discharge limitations:

BOD	-	10 mg/l
SS	-	10 mg/l
TP	-	1.0 mg/l May to October
NH_3-N	-	2.0 mg/l May to November
PCB	-	0.1 ug/l
FC	-	200/100 ml April to October

Compilation of Data

Certain NEPA documents were obtained from EPA regarding the Bloomington project:

1. Investigation of key issues to be addressed in the EIS for sewage treatment facilities for the South Bloomington and Lake Monroe Service Area, Bloomington, Indiana, dated December, 1975.

2. Draft EIS, dated March, 1976.

3. Final EIS, dated August, 1976.

4. Supplement to Final EIS, dated January 26, 1977.

Current data was obtained by the original study team through personal observation and discussion with a local county planner

(Mr. Daniel Combs) during a site visit. Additional information was obtained by the edit/review study team through telephone conversations.

Evaluation of Data

Available data gathered by the original study team and the edit/-review study team were evaluated for the two short-term impact categories, five long-term impact categories and two grant conditions discussed in the EIS which cover all the types of impacts previously discussed. All predictions were qualitative. Table V-2 summarizes the findings with respect to each predicted impact. Appendix D contains the evaluation forms.

Findings of Analysis

All of the qualitative predictions made with respect to the Dillman Road WWTP were determined through this evaluation to have been accurate. It should be noted that the effluent limits were relaxed due to a re-evaluation of the low flow characteristics of Clear Creek at the Dillman Road site. The original effluent limits and the actual effluent limits are given in the evaluation form in Appendix D-2.

Two unanticipated impacts resulted from the project. Blasting carried out by the interceptor construction contractor resulted in damage to a nearby house foundation. The damage was repaired through the contractor's insurance. Also, the small community of Clear Creek, Indiana (15-20 homes), was provided access to city water as partial payment for interceptor and water line easements through the area.

TABLE V-2
SUMMARY OF FINDINGS

PARAMETER	IMPACT PREDICTION	ACTUAL IMPACT	PREDICTION ACCURATE?
Short-term			
Terrestrial Biota	Minimal impact with mitigation	Revegetation completed within one year	Yes
Siltation	Minimal impact with mitigation	Mitigation carried out No measurable impact	Yes
Long-term			
Effluent Limits	BOD - 10 mg/l SS - 10 mg/l TP - 1.0 mg/l 5/1-10/31 NH_3-N - 2.0 mg/l 5/1-11/30 5.0 mg/l 12/1-4/30 PCB - 0.1 ug/l FC - 200/100 ml 4/1-10/31	1984 Average BOD - 3 mg/l SS - 1 mg/l	Yes
Water Quality	Long-term improvement	Observable improvement in odor, turbidity and algae. Measurable improvement (BOD) between upstream and downstream of discharge	Yes
Visual	Minimal impacts	No significant adverse impact	Yes
Traffic	Minimal impacts	No significant change in traffic	Yes
Recreation	Recreational opportunities preserved	Flows maintained to support canoeing	Yes
Land Use	No induced growth around Lake Monroe	700 unit increase as of 1984	Yes
Grant Conditions			
Applicant would identify toxic compounds formed during chlorination. Mitigate if they exceed federal/state standards		Carried out, mitigation not required	Yes
Applicant shall develop sludge disposal plan		Plan developed and will be operational in mid-1985	Yes

APPENDIX A

DATA BASE FOR PROTOTYPE REPORT
IMPACTS ON WETLANDS AND FLOODPLAINS

APPENDIX A-1

LEGEND* FOR LIST OF GRANTS AND
GICS INFORMATION FOR SELECTED FACILITY NUMBERS
FOR WETLAND/FLOODPLAIN STUDY

87 - Project Step Code
1 = Step 1
2 = Step 2
3 = Step 3
4 = Combined Steps 2 and 3

N4 - F-EIS Code and Date (Region V)
T = original target date
N = Finding of No Significant Impact
A = Record of Decision

Project Award - year, month, day
T = original target date
A = final event, grant award accepted

%CP - Percent Complete

CP - Completed

N5 - year, month, day
T = original target date
TA = rescheduled/municipal backlog
TD = rescheduled/contractor-consultant problems
A = final event - project completed

Needs Number - Facility Number

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* For complete interpretation of all items, see complete GICS legend.

	GRANT NUMBER	59 & 7	APPLICNT NAME	N &	PROJECT ALARD	X CP	PROJECT COMPLETE	NEEDS NUMBER (Fac. No.)	EPA CST/EST	TOTFLA DESIGN	CONSULT FIRM	CONSULTANT NAME
	171501N01	4	MASON VILLAGE OF	T [illegible]	A 800331	CP	A 821011	170595001	000572321		0604	MILAND & GRUNLOH ENGINEERS
	~~171416C01~~	~~1~~	~~[illegible] VILLAGE OF~~		~~A 770427~~	~~CP~~	~~A [illegible]~~	~~170595002~~	~~[illegible]~~		~~0604~~	~~MILAND & GRUNLOH ENGINEERS~~
	171416C02	4	EDGEWOOD VILLAGE OF	T [illegible]125	A 800612	96	A 831201	170595002	000914600	000615	1011	MILAND & GRUNLOH ENGINEERS
	~~171402C02~~	~~3~~	~~ITASCA VILLAGE OF~~		~~T 841004~~		~~T [illegible]~~	~~173795001~~	~~014326557~~		~~C077~~	~~BAXTER & WOODMAN~~
	~~171402N01~~	~~1~~	~~ITASCA VILLAGE OF~~		~~A 800611~~	~~CP~~	~~T [illegible]~~	~~173795001~~	~~003155330~~		~~0473~~	~~J R KOEHLER~~
	~~171115N01~~	~~1~~	~~[illegible]PORT CITY OF~~	~~N [illegible]~~	~~A 751514~~	~~CP~~	~~A 751123~~	~~171015001~~	~~004000141~~	~~030036~~	~~0545~~	~~CONNOR & CONNOR, INC.~~
	~~171215N01~~	~~1~~	~~WESTFIELD VILLAGE OF~~	~~N 771112~~	~~A 760217~~	~~CP~~	~~A 800315~~	~~173202001~~	~~000318575~~		~~0545~~	~~CONNOR & CONNOR, INC.~~
ILLINOIS	~~171215C02~~	~~2~~	~~WESTFIELD VILLAGE OF~~	~~N 791910~~	~~A 791121~~	~~67~~	~~T 810326~~	~~173202001~~	~~000397500~~		~~0545~~	~~CONNOR & CONNOR, INC.~~
	171215C03	3	WESTFIELD VILLAGE OF		A 830312		T 861122	173202001	001554500	000075	0545	CONNOR & CONNOR, INC.
	~~173446N01~~	~~3~~	~~AL[illegible] OF~~	~~N 742117~~	~~A 730225~~	~~CP~~	~~A 730325~~	~~175317001~~	~~003026557~~	~~000016~~	~~0302~~	~~HISSMAN STANLEY FARPER & A~~
	~~140623N01~~	~~1~~	~~CARMEL CITY OF (CLAY T~~	~~N 440639~~	~~A 750610~~	~~85~~	~~T 830123~~	~~180015001~~	~~000337105~~		~~0935~~	~~C E WILLIAMS & ASSOC~~
	~~140623N03~~	~~1~~	~~CARMEL CITY OF~~		~~T 840315~~			~~180015002~~	~~004000000~~		~~0935~~	~~C E WILLIAMS & ASSOC~~
	140445N01	3	CARMEL TOWN OF	N 730629	A 730630	CP	A 781216	180015002	004703700	000300	0935	C E WILLIAMS & ASSOC
	~~140623C02~~	~~2~~	~~CARMEL CITY OF~~		~~A 790825~~	~~CP~~	~~A 821010~~	~~180015002~~	~~003013993~~		~~0935~~	~~C E WILLIAMS & ASSOC~~
	~~140623C04~~	~~2~~	~~CARMEL CITY OF~~		~~A 830331~~	~~CP~~	~~A 800330~~	~~180015002~~	~~030170176~~		~~0938~~	~~C E WILLIAMS & ASSOC~~
	140623C05	3	CARMEL CITY OF		A 800930	96	A 830823	180015002	005860400		0938	C E WILLIAMS & ASSOC
	~~140623C04~~	~~2~~	~~CARMEL CITY OF~~		~~A 810331~~	~~99~~	~~A 810321~~	~~180015002~~	~~000000033~~	~~000500~~	~~0414~~	~~HOWARD NEEDLES TAMMEN~~
	140623C03	3	CARMEL CITY OF		A 810921	74	TA340531	180015002	000415600		0135	HOWARD NEEDLES TAMMEN&BERG
	140623C07	3	CARMEL CITY OF		A 810921	89	TD340530	180015002	006022200	000600	0135	HOWARD NEEDLES TAMMEN&BERE
	~~140444N01~~	~~1~~	~~SCHNEIDER TOWN OF~~	~~N 770220~~	~~A 760322~~	~~CP~~	~~A 770113~~	~~180114001~~	~~000014000~~		~~0663~~	~~PELLER TANCK GERTSMEIER~~
	140444C02	4	SCHNEIDER TOWN OF		A 790923	97	A 830123	180114001	001100000	000006	0663	PELLER TANCK GERTSMEIER
	~~143523C19~~	~~3~~	~~FORT WAYNE CITY OF~~		~~T 770393~~			~~180225001~~	~~011000333~~		~~0316~~	~~CITY OF FT WAYNE ENGR DEPT~~
	~~143523C11~~	~~1~~	~~FORT WAYNE CITY OF~~		~~T 770393~~			~~180225001~~	~~007333333~~		~~0316~~	~~CITY OF FT WAYNE ENGR DEPT~~
	~~143774C04~~	~~3~~	~~FORT WAYNE CITY OF~~		~~T 840913~~			~~180225001~~	~~003500533~~		~~0331~~	~~H. B. STEEG ASSOCIATES~~
	~~143775C02~~	~~3~~	~~FORT WAYNE CITY OF~~		~~T 840915~~			~~180225001~~	~~031500033~~		~~0316~~	~~CITY OF FT WAYNE ENGR DEPT~~
	143362N01		FORT WAYNE CITY OF	N 750203	A 701113	CP	A 770302	180225001	001395200		0831	H. B. STEEG ASSOCIATES
	143475N01		FORT WAYNE CITY OF	N 730130	A 730203	CP	A 781101	180225001	003148183	001350	0316	CITY OF FT WAYNE ENGR DEPT
	~~143774N01~~	~~1~~	~~FORT WAYNE CITY OF~~	~~N 771193~~	~~A 740627~~	~~CP~~	~~A 771228~~	~~180225001~~	~~003075500~~	~~006000~~	~~0331~~	~~H. B. STEEG ASSOCIATES~~
	~~143775N01~~	~~1~~	~~FORT WAYNE CITY OF~~		~~A 740627~~	~~77~~	~~T 821222~~	~~180225001~~	~~031055100~~		~~0316~~	~~CITY OF FT WAYNE ENGR DEPT~~
	180538N01	3	FORT WAYNE CITY OF	N 740622	A 740627	99	A 831020	180225001	034246000	006000	0831	H. B. STEEG ASSOCIATES
	180639N01	3	FORT WAYNE CITY OF	N 770403	A 770531	CP	A 810506	180225001	002395958	000000	0108	RONALD L BONAR AND ASSOC.
	~~180599N01~~	~~1~~	~~FORT WAYNE CITY OF~~	~~N 820722~~	~~A 780118~~	~~62~~	~~A 780118~~	~~180225001~~	~~006281000~~		~~0316~~	~~CITY OF FT WAYNE ENGR DEPT~~
	~~143774C02~~	~~2~~	~~FORT WAYNE CITY OF~~	~~A 771103~~	~~A 780226~~	~~CP~~	~~A 800926~~	~~180225001~~	~~030577226~~	~~006000~~	~~0831~~	~~H. B. STEEG ASSOCIATES~~
	~~143599C02~~	~~2~~	~~FORT WAYNE CITY OF~~		~~A 800519~~	~~CP~~	~~A 830826~~	~~180225001~~	~~000142141~~		~~0316~~	~~CITY OF FT WAYNE ENGR DEPT~~
	~~143599C03~~	~~2~~	~~FORT WAYNE CITY OF~~		~~A 800529~~	~~CP~~	~~A 800906~~	~~180225001~~	~~000120098~~		~~0316~~	~~CITY OF FT WAYNE ENGR DEPT~~
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	~~143599C05~~	~~2~~	~~FORT WAYNE CITY OF~~		~~A 830826~~	~~CP~~	~~A 800926~~	~~180225001~~	~~000018150~~		~~0316~~	~~CITY OF FT WAYNE ENGR DEPT~~
	143599C06	3	FORT WAYNE CITY OF		A 800926	99	A 821226	180225001	015647100		0316	CITY OF FT WAYNE ENGR DEPT
	180599C07	3	FORT WAYNE CITY OF		A 800903	93	A 821226	180225001	003639000		0316	CITY OF FT WAYNE ENGR DEP
	180599C08	3	FORT WAYNE CITY OF		A 800926	90	A 830331	180225001	007212500		0108	RONALD L BONAR AND ASSOC.
	180599C09	3	FORT WAYNE CITY OF		A 800926	98	A 830223	180225001	034807500		0316	CITY OF FT WAYNE ENGR DEP
	180774C03	3	FORT WAYNE CITY OF		A 800926	92	A 840417	180225001	014020500	006000	0331	H. B. STEEG ASSOCIATES
	~~143999C02~~	~~2~~	~~JACKSON CY [illegible]~~		~~A 790412~~	~~CP~~	~~A 801021~~	~~134714001~~	~~000022139~~	~~000095~~	~~0182~~	~~COMMONWEALTH ENGINEERS IN~~
	~~181076N01~~	~~1~~	~~JACKSON COUNTY RSD~~		~~A 830331~~	~~24~~		~~134714001~~	~~000016000~~		~~0182~~	~~COMMONWEALTH ENGINEERS IN~~
INDIANA	180799C03	3	JACKSON COUNTY RSD		A 800630	CP	A 821021	134714001	000559103		0182	COMMONWEALTH ENGINEERS IN
	~~153554C02~~	~~3~~	~~WARSAW CITY OF~~		~~T 790903~~			~~184862001~~	~~003430000~~			
	~~153554N01~~	~~1~~	~~WARSAW CITY OF~~		~~A 760830~~	~~94~~	~~A1791205~~	~~184862001~~	~~030275600~~		~~0775~~	~~P L SCHNELKER INC~~
MICHIGAN	262348C04	3	LESLIE, VILLAGE OF		T 870528		T 850331	260063001	004162100		0146	CAPITOL CONSULTANTS INC
	~~262348N01~~	~~1~~	~~LESLIE CITY OF~~	~~N 731011~~	~~A 760204~~	~~CP~~	~~A 791119~~	~~260063001~~	~~000054306~~	~~000130~~	~~0146~~	~~CAPITOL CONSULTANTS INC~~
	~~262348C02~~	~~2~~	~~LESLIE CITY OF~~		~~A 791219~~	~~CP~~	~~A 810933~~	~~260063001~~	~~000153223~~		~~0146~~	~~CAPITOL CONSULTANTS INC~~
	~~262771C33~~	~~3~~	~~MUSKEGON COUNTY [illegible]~~		~~T 841123~~			~~260214001~~	~~031405000~~		~~0961~~	~~WILLIAMS & WORKS~~

NOTE: Projects lined out were eliminated from further consideration.

	GRANT NUMBER	SD	S	APPLICANT NAME	N	PROJECT AWARD	% CP	PROJECT COMPLETE	NEEDS NUMBER	EPA CST/EST	TOTFLW DESIGN	CONSULT FIRM	CONSULTANT NAME
MICHIGAN	~~263771N01~~	~~1~~	~~3~~	~~MUSKEGON COUNTY DR.~~	~~N 770213~~	~~A 760227~~	~~99~~	~~A 811122~~	~~260214001~~	~~0000000~~	~~096403~~	~~0941~~	~~WILLIAMS & WORKS~~
	~~263771C01~~	~~1~~	~~3~~	~~MUSKEGON COUNTY DR.~~	~~N 770217~~	~~A 760227~~	~~CP~~	~~A 720112~~	~~260214001~~	~~000146021~~	~~095230~~	~~0941~~	~~WILLIAMS & WORKS~~
	~~263771C04~~	~~2~~	~~3~~	~~MUSKEGON COUNTY DRN~~	~~N 770224~~	~~A 770413~~	~~CP~~	~~A 730119~~	~~260214001~~	~~000347117~~	~~000023~~	~~0941~~	~~WILLIAMS & WORKS~~
	~~263771C10~~	~~2~~	~~3~~	~~MUSKEGON COUNTY OF~~	~~N 770223~~	~~A 770429~~	~~CP~~	~~A 780118~~	~~260214001~~	~~000044355~~	~~000059~~	~~0941~~	~~WILLIAMS & WORKS~~
	~~263771C15~~	~~2~~	~~3~~	~~MUSKEGON COUNTY OF~~	~~N 770225~~	~~A 770429~~	~~CP~~	~~A 790807~~	~~260214001~~	~~000558165~~	~~000300~~	~~0972~~	~~KEIFER AND ASSOC~~
	~~263014C07~~	~~2~~	~~3~~	~~MUSKEGON COUNTY FRUITLAND~~		~~A 770429~~	~~CP~~	~~A 730112~~	~~260214001~~	~~000141433~~	~~000021~~	~~0429~~	~~R.A. JACKSON & ASSOCIATES~~
	~~263771C22~~	~~2~~	~~3~~	~~MUSKEGON CO~~	~~N 770216~~	~~A 770423~~	~~CP~~	~~A 790604~~	~~260214001~~	~~000023445~~	~~000171~~	~~0941~~	~~WILLIAMS & WORKS~~
	~~263771C27~~	~~2~~	~~3~~	~~MUSKEGON COUNTY OF~~	~~N 770222~~	~~A 770103~~	~~CP~~	~~A 730113~~	~~260214001~~	~~000021463~~	~~000260~~	~~0941~~	~~WILLIAMS & WORKS~~
	~~263771C13~~	~~2~~	~~3~~	~~MUSKEGON COUNTY OF~~	~~N 770223~~	~~A 770409~~	~~CP~~	~~A 760112~~	~~260214001~~	~~000116641~~	~~000663~~	~~0429~~	~~R.A. JACKSON & ASSOCIATES~~
29	263771C11	3		MUSKEGON COUNTY OF	N 770229	A 750119		AC790111	260214001	000000001	000057	0429	R.A. JACKSON & ASSOCIATES
30	263771C12	3		MUSKEGON COUNTY OF	N 770215	A 720119	CP	A 801222	260214001	003557433	000223	0429	R.A. JACKSON & ASSOCIATES
31	263771C16	3		MUSKEGON COUNTY OF	N 770225	A 780119	99	T9840630	260214001	015337900	000000	0429	R.A. JACKSON & ASSOCIATES
32	263771C21	3		MUSKEGON COUNTY OF	N 770215	A 780119	CP	A 810731	260214001	003559372	050000	0429	R.A. JACKSON & ASSOCIATES
33	263771C22	3		MUSKEGON COUNTY OF	N 770215	A 780119	97	A 801228	260214001	007303437	000000	0429	R.A. JACKSON & ASSOCIATES
34	263771C24	3		MUSKEGON COUNTY OF	N 770228	A 790119	99	A 820311	260214001	000769982	000000	0941	WILLIAMS & WORKS
35	263771C22	3		MUSKEGON COUNTY OF		A 730119	CP	A 801222	260214001	000749647	000000	0429	R.A. JACKSON & ASSOCIATES
36	263771C29	3		MUSKEGON COUNTY OF		A 720131	40	TT840930	260214001	001799730	000050	0941	WILLIAMS & WORKS
	~~263994N01~~	~~1~~	~~3~~	~~PONTIAC TOWNSHIP~~	~~N 760223~~	~~A 761028~~	~~CP~~	~~A 730622~~	~~260570001~~	~~0301130~~	~~000016~~	~~0648~~	~~ORCHARD PAPKE & MCCLIME~~
	~~263994C02~~	~~2~~	~~3~~	~~PONTIAC TOWNSHIP OF~~	~~N 770217~~	~~A 770229~~	~~CP~~	~~A 790623~~	~~260570001~~	~~003355357~~	~~000596~~	~~0648~~	~~ORCHARD PAPKE & MCCLIME~~
38	263994C03	3		PONTIAC TOWNSHIP OF		A 780119		AC791031	260570001	000000001	000000	0648	ORCHARD PAPKE & MCCLIME
	~~263781N01~~	~~1~~	~~3~~	~~ALPENA CNTY DR.~~	~~N 770229~~	~~A 760226~~	~~CP~~	~~A 810617~~	~~262000001~~	~~000124130~~		~~0573~~	~~MCNAMEE PORTER & SEELEY~~
	~~263781C02~~	~~2~~	~~3~~	~~ALPENA COUNTY DRN~~	~~N 770229~~	~~A 770423~~	~~CP~~	~~A 800121~~	~~262000001~~	~~030333250~~		~~0781~~	~~P & GEOFF ENGINEERING~~
	~~263781C06~~	~~2~~	~~3~~	~~ALPENA COUNTY OF~~		~~A 770324~~	~~CP~~	~~A 810424~~	~~262000001~~	~~003174691~~	~~000752~~	~~0573~~	~~MCNAMEE PORTER & SEELEY~~
39	263781C03	3		ALPENA COUNTY OF		A 780119	CP	A 790829	262000001	004336344	000000	0573	MCNAMEE PORTER & SEELEY
40	263781C07	3		ALPENA COUNTY OF		A 731115	CP	A 800826	262000001	006134836	000000	0574	MCNAMEE PORTER & SEELEY
41	263781C05	3		ALPENA COUNTY		A 810724	81	T 840401	262000001	000501130	000550	0573	MCNAMEE PORTER & SEELEY
	~~262493N01~~	~~1~~	~~3~~	~~CALHOUN COUNTY OF~~	~~N 750519~~	~~A 740503~~	~~94~~	~~A 770419~~	~~262006001~~	~~000073161~~	~~000360~~	~~0446~~	~~JONES & HENRY~~
42	262493C02	3		CALHOUN COUNTY DR.	N 750520	A 750521	98	A 830330	262006001	005326122	000400	0446	JONES & HENRY
	~~263314N01~~	~~1~~	~~3~~	~~CALHOUN CNTY. DR. PUBL~~	~~N 760532~~	~~A 760525~~	~~CP~~	~~A 771203~~	~~262006001~~	~~000030193~~	~~000017~~	~~0299~~	~~FISHBECK THOMPSON CARR &~~
	~~262631N01~~	~~1~~	~~3~~	~~CALHOUN COUNTY DR.~~	~~N 790110~~	~~A 760630~~	~~CP~~	~~A 790113~~	~~262006001~~	~~000026919~~		~~0345~~	~~GOVE ASSOC INC~~
	~~262493C03~~	~~2~~	~~3~~	~~CALHOUN COUNTY OF~~		~~A 770316~~	~~CP~~	~~A 820929~~	~~262006001~~	~~000004503~~		~~0446~~	~~JONES & HENRY~~
43	263257N01	3		CALHOUN COUNTY OF		A 770930	CP	A 800131	262006001	002823719	000028	0345	GOVE ASSOC INC
44	262493C04	3		CALHOUN CO		A 800520	CP	A 820521	262006001	000202565		0446	JONES & HENRY
	~~262930N01~~	~~1~~	~~3~~	~~GENESEE COUNTY~~	~~N 770531~~	~~A 760206~~	~~CP~~	~~A 771212~~	~~262101001~~	~~000075000~~		~~0928~~	~~WIGHTMAN & ASSOC INC~~
45	262930C02	3		GENESEE COUNTY DPW		A 780630	CP	A 810709	262101001	000585396	000032	0928	WIGHTMAN & ASSOC INC
	~~262916C01~~	~~1~~	~~3~~	~~COLON, VILLAGE OF~~		~~T 870929~~			~~262165001~~	~~003599000~~	~~000028~~	~~0721~~	~~RICHARDSON & NORDLUND INC~~
	~~262916N01~~	~~1~~	~~3~~	~~COLON VILLAGE OF~~	~~N 770429~~	~~A 760227~~	~~CP~~	~~A 771026~~	~~262165001~~	~~000007254~~	~~000928~~	~~0721~~	~~RICHARDSON & NORDLUND INC~~
	~~262916C02~~	~~2~~	~~3~~	~~COLON VILLAGE OF~~	~~N 770429~~	~~A 770531~~	~~99~~	~~A 771001~~	~~262165001~~	~~000034290~~	~~000028~~	~~0721~~	~~RICHARDSON & NORDLUND INC~~
	~~263067C04~~	~~1~~	~~3~~	~~COLDWATER, CITY OF~~		~~T 870923~~			~~263067001~~	~~000716000~~			
	~~263067N02~~	~~4~~	~~3~~	~~COLDWATER, CITY OF~~		~~T 870924~~			~~263067001~~	~~006528900~~			
	~~262744N01~~	~~1~~	~~3~~	~~BRANCH COUNTY DRW~~	~~N 791211~~	~~A 760130~~	~~83~~	~~A 800109~~	~~263067001~~	~~000373100~~		~~0030~~	~~AQUA-TECH~~
	~~262744C02~~	~~2~~	~~3~~	~~BRANCH COUNTY DPW~~		~~A 800205~~	~~CP~~	~~A 810806~~	~~263067001~~	~~000265003~~	~~000124~~	~~0056~~	~~AYRES LEWIS NORRIS & MAY~~
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	~~262757N01~~	~~1~~	~~3~~	~~WEST BAY COUNTY SEWER~~	~~NW400204~~	~~A 760325~~	~~CP~~	~~A 800414~~	~~263147001~~	~~000146939~~		~~0323~~	~~GENERAL ENGINEERING CO~~
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46	263275N01	3		MISSAUKEE COUNTY OF		A 780321	96	A 300715	263209001	001478530	000010	0698	PROGRESSIVE ENGRG CONSUL
	~~279037C02~~	~~1~~	~~3~~	~~M.CC - MUNTR PRIMARY~~		~~T 841024~~			~~270001001~~	~~313790093~~			
	~~279037C01~~	~~1~~	~~3~~	~~M.CC - MUNTR SECONDARY~~		~~T 841028~~			~~270001001~~	~~065800003~~			
MINNESOTA 47	270671N01			MCCC		A 720701	CP	A 750723	270001001	000352243			
48	270650N01			MCCC	N 723619	A 720724	CP	A 761104	270001001	005406005	001830	0979	METROPOLITAN WASTE CONTRO

"4" is a combined 2 + 3

GRANT NUMBER	SC NO	2 7	APPLICANT NAME	N 4	PROJECT AWARD	X CP	PROJECT COMPLETE	NEEDS NUMBER	EPA CST/EST	TOTFLW DESIGN	CONSULT FIRM	CONSULTANT NAME
~~273642N01~~	~~2~~	~~MWCC - MWWTP EFFLUENT~~	~~N 730625~~	~~A 730628~~	~~CP~~	~~A 771206~~	~~270001001~~	~~003325659~~	~~029000~~	~~0979~~	~~METROPOLITAN WASTE CONTROL~~
~~273665N01~~	~~4~~	~~MWCC - MWWTP AERATION~~	~~N 730625~~	~~A 730629~~	~~CP~~	~~A 779316~~	~~270001001~~	~~031412747~~	~~029000~~	~~0979~~	~~METROPOLITAN WASTE CONTROL~~
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(32) 273661N01	3	MWCC - MWWTP	N 730625	A 730629	CP	A 771220	270001001	002195572	000000	0979	METROPOLITAN WASTE CONTROL
(33) 273653N01	4	MWCC - MWWTP PRETREATM	N 730625	A 730629	CP	A 730701	270001001	014949296	065500	0979	METROPOLITAN WASTE CONTROL
(34) 273664N01	4	MWCC - MWWTP PRIMARY T	N 730625	A 730629	CP	A 792527	270001001	021626635	029000	0979	METROPOLITAN WASTE CONTROL
(35) 273616N01	3	MWCC - MWWTP FLOOD PRO	N 730625	A 730731	CP	A 730103	270001001	009963457	000000	0979	METROPOLITAN WASTE CONTROL
(36) 273652C02	3	MWCC - MWWTP EFFLUENT	N 730625	A 740524	CP	A 730120	270001001	006036331	065500	0979	METROPOLITAN WASTE CONTROL
(37) 273665C02	3	MWCC - MWWTP AERATION	N 730629	A 741024	CP	A 800628	270001001	047307185	029000	0979	METROPOLITAN WASTE CONTROL
(38) 273664C02	3	MWCC - MWWTP COMPRESSO	N 750429	A 751123	CP	A 320914	270001001	003140577		0979	METROPOLITAN WASTE CONTROL
(39) 279000N01	3	MWCC - MWWTP SLUDGE TH	N 760430	A 760527	97	A 820119	270001001	030799652	029000	0979	METROPOLITAN WASTE CONTROL
(40) 273665C03	3	MWCC - MWWTP AERATION	N 730628	A 760623	CP	A 800726	270001001	002009377	029000	0979	METROPOLITAN WASTE CONTROL
(41) 279000C02	3	MWCC - MWWTP SLUDGE CO	N 760603	A 760623	99	A 820914	270001001	036567336	029000	0979	METROPOLITAN WASTE CONTROL
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(44) 279000C05	3	MWCC - MWWTP SLUDGE PR	N 770629	A 770725	91	A 831115	270001001	075535300	000000	0979	METROPOLITAN WASTE CONTROL
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(48) 279000C07	3	MWCC - MWWTP COMPUTER		A 790928	99	A 810422	270001001	031940240	000000	0979	METROPOLITAN WASTE CONTROL
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(51) 279091N01	3	MWCC - MWWTP		A 791023	93	A 820915	270001001	013970200	022000	0861	TOLTZ KING DUVALL ANDERSON
(52) 279093N01	3	MWCC - MWWTP WAREHOUSE		A 800917	98	A 821228	270001001	005016700	029000	0861	TOLTZ KING DUVALL ANDERSON
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~~273642N01~~	~~1~~	~~NORTHFIELD, CITY OF~~	~~N 781031~~	~~A 750311~~	~~99~~	~~T 841028~~	~~270036001~~	~~000176500~~		0109	BONESTROO ROSENE ANDERLI
~~273642C02~~	~~2~~	~~NORTHFIELD, CITY OF~~		~~A 770115~~	~~99~~	~~A 829427~~	~~270036001~~	~~000269003~~		~~0109~~	~~BONESTROO ROSENE ANDERLI~~
(53) 273642C03	3	NORTHFIELD, CITY OF		A 801229	97	A 830928	270036001	006915760	000150	0109	BONESTROO ROSENE ANDERLI
~~271434C02~~	~~4~~	~~WASHINGTON COUNTY~~		~~A 830927~~	~~03~~	~~T 843726~~	~~270056001~~	~~010361103~~	~~000009~~	~~0263~~	~~OWEN AYRES & ASSOCIATES, I~~
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(54) 270746C02	4	PAYNESVILLE, CITY OF		A 800630	85	T 850928	270299001	002617800	000089	0488	N A KUUSISTO
~~271372C01~~	~~3~~	~~SAINT JOSEPH, CITY OF~~		~~T 851129~~			~~270305001~~	~~000540000~~	~~000033~~		
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(55) 270953C03	3	COKATO, CITY OF		A 801201	CP	A 830728	270347001	000730673	000039	0589	MEYER ROHLIN INC, ENGINEE
~~271245N01~~	~~1~~	~~ORTONVILLE, CITY OF~~	~~NU600514~~	~~A 730412~~	~~CP~~	~~A 600624~~	~~271104001~~	~~000385935~~		~~0832~~	~~ELLERBE ASSOCIATES, INC~~
(56) 271245C02	4	ORTONVILLE, CITY OF		A 810107	92	T 840625	271104001	002623700	000037	0832	ELLERBE ASSOCIATES, INC
~~271331C03~~	~~4~~	~~MACKENSACK, CITY OF~~		~~T 840514~~			~~271209001~~	~~000449000~~		~~0551~~	~~MATEFFY ENGINEERING~~
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~~279043C02~~	~~4~~	~~BROWNSVILLE, CITY OF~~		~~T 840720~~			~~275501001~~	~~001334900~~		~~010197~~	~~CONSULTING ENGINEERS DIVE~~
~~279043C03~~	~~4~~	~~BROWNSVILLE, CITY OF~~		~~T 861028~~			~~275501001~~	~~000432300~~			
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no OHIO

FOR WETLAND/FLOODPLAIN WORK

GRANT NUMBER	SD NO	Z	APPLCNT NAME	N 4	PROJECT AWARD	X CP	PROJECT COMPLETE	NEEDS NUMBER	EPA CST/EST	TOTFLW DESIGN	CONSULT FIRM	CONSULTANT NAME
270[illegible]4[illegible]01	4	[illegible]	[illegible], CITY O		A 819121	97	T [illegible]41029	275904001	001352920	000015	0731	PIEKE-CARROLL-MULLER & AS
271274[illegible]02	[illegible]	[illegible]	[illegible], CITY OF		T [illegible]			277503001	002274003		0731	PIEKE-CARROLL-MULLER & AS
271274[illegible]03	[illegible]	[illegible]	[illegible], CITY OF		T 929003			277503001	002303003			
271274N001	1	[illegible]	[illegible], CITY OF	1 231227	A 725231	85	4 [illegible]4011[illegible]	277503001	000043036	668007	0731	
273[illegible]21[illegible]03	3	[illegible]	[illegible], CITY OF		T 929003			279405001	000107160			
273[illegible]94[illegible]01	1	[illegible]	[illegible], CITY OF	1 [illegible]	A 749[illegible]21	91	1 [illegible]25	279405001	000[illegible]3774	000021	0264	OWEN AYRES & ASSOCIATES,
273[illegible]916[illegible]02	2	[illegible]	[illegible], CITY OF		A 723731	CA	T [illegible]423	279405001	000049545	000021	0252	OWEN AYRES & ASSOCIATES,

NUMBER OF RECORDS PRINTED = 150

APPENDIX A-2

FIELD INVESTIGATION REPORT FOR SCHNEIDER, INDIANA (Grant Number 180444002)

Purpose of Study

The purpose of this field investigation was to observe actual building impacts and mitigating measures that resulted from the construction of wastewater treatment facilities and an interceptor in Schneider, Indiana. The findings from this report form the data base for the aggregate analysis of wetland and floodplain issues.

Scope of Issues (Project Background and Predicted Impacts)

The Town of Schneider, Indiana, constructed a 0.065 mgd oxidation ditch treatment plant one mile north of the developed residential area at the southwest corner of Ackerman Avenue and Brown Ditch. A sewer system was installed for the town with a main interceptor connecting the Town to the plant. Effluent is discharged to Brown Ditch immediately adjacent to the plant. The treatment plant and the entire service area are located within the 100-year floodplain of the Kankakee River, located 1/2 mile south of town. The purpose of the planned construction was to abate existing groundwater contamination from malfunctioning septic systems and surface water pollution to Dike Ditch south of town. Figures showing project location, floodplain boundaries, and relative position on a USFWS National Wetlands Inventory Map are found at the end of this report.

The predicted impacts were derived from the 1976 Facilities Plan for the Town of Schneider written by the engineering firm, PTGR, Inc.

- There will be a two acre minimum site requirement for the treatment plant which will cause a permanent loss of the current land use - sod farming. This land is within the 100-year floodplain (paraphrased from facility plan). This is a quantitative impact.

- "The construction of the treatment facility will be at an elevation five to eight feet above existing ground elevation to provide flood protection." This mitigating measure was based on an IDNR recommendation (located in Correspondence Appendix) that the finished elevation of facilities be at least three feet above the 100-year floodplain elevation of 635 feet mean sea level (msl). The plant site is somewhere between 625-630 feet msl. This statement may be interpreted to predict that (a) changes in flood storage capacity of the floodplain will occur with the construction of the mounded area for the plant site and (b) there will be localized changes in drainage patterns in the floodplain around the plant site. Interpreted prediction (a) can be considered quantitative because an actual volume can be calculated which represents two acres covering a depth of five to eight feet (between 216, 264 and 346, 112 cubic feet). Statement (b) is a qualitative prediction.

Methods

Prior to field investigation, the following data base materials were collected:

- Schneider Quadrangle - USGS Topographic Map 1959 (photorevised 1980). (SHOWS PRE-CONSTRUCTION DATA)

- Schneider Quadrangle - USGS Map of Floodprone Areas 1972. (PRE-CONSTRUCTION DATA)

- FEMA Flood Insurance Rate Maps (FIRM) for Town of Scheider and unincorporated areas of Lake County (initial investigation 1973, revised 1976). Requested by community numbers. (PRE-CONSTRUCTION DATA)

- Schneider portion of the National Wetland Inventory Map (USFWS photocopy, not field checked). Date unknown.

- IDNR, Flood Planning Section. Flood record data for Kankakee River (background information). (PRE-CONSTRUCTION DATA)

- USEPA River Reach File Map containing project area. Requested by latitude/longitude polygon.

No contacts were made with the construction/design engineers or with any plant operator in Schneider. No plant operator is normally on duty at the treatment plant.

A site visit on July 17, 1984, consisted of viewing the constructed plant from all sides, walking up and down the stream bank in the immediate area of Brown Ditch, observing the outfall structure along that bank, and locating manholes to determine the actual sewer alignment between the plant and the town. Photographs were taken to document observations.

Findings

The WWTP was constructed on a mounded area approximately eight to ten feet above the adjacent grade and currently covers approximately two acres of land (including a sludge drying/disposal area to the west of the oxidation ditch). (Expansion is proposed to the south of the oxidation ditch.) The mound was created using borrow material from within the floodplain (statement implied from facility plan) negating any loss in overall flood storage capacity. Creation of this mound has likely changed the floodplain boundaries in the vicinity of the WWTP site, but this impact is considered insignificant by the reviewers when compared to the extensive floodplain area of the Kankakee River which flows through a griddle flat plain. A localized change in runoff patterns has occurred because of the mounded site but this impact is considered minor and no ponding was observed around the site following a day of rain. The embankment around the plant has been sodded to minimize erosion.

No interceptor impacts were addressed in the NEPA document (also in the 100-year floodplain) and no long-term adverse impacts were observed. The main sewer line has been constructed in the right-

of-way to the west of Ackerman Avenue and is currently underneath fields of grain and a sod farm.

The facilities plan did not discuss any impacts resulting from the physical location of the effluent pipe in the floodplain. Rip-rap was observed all around the pipe and natural vegetation was growing nearby. The normal condition of the floodplain of the channelized Brown Ditch was very similar to the slope and other conditions observed at the discharge pipe.

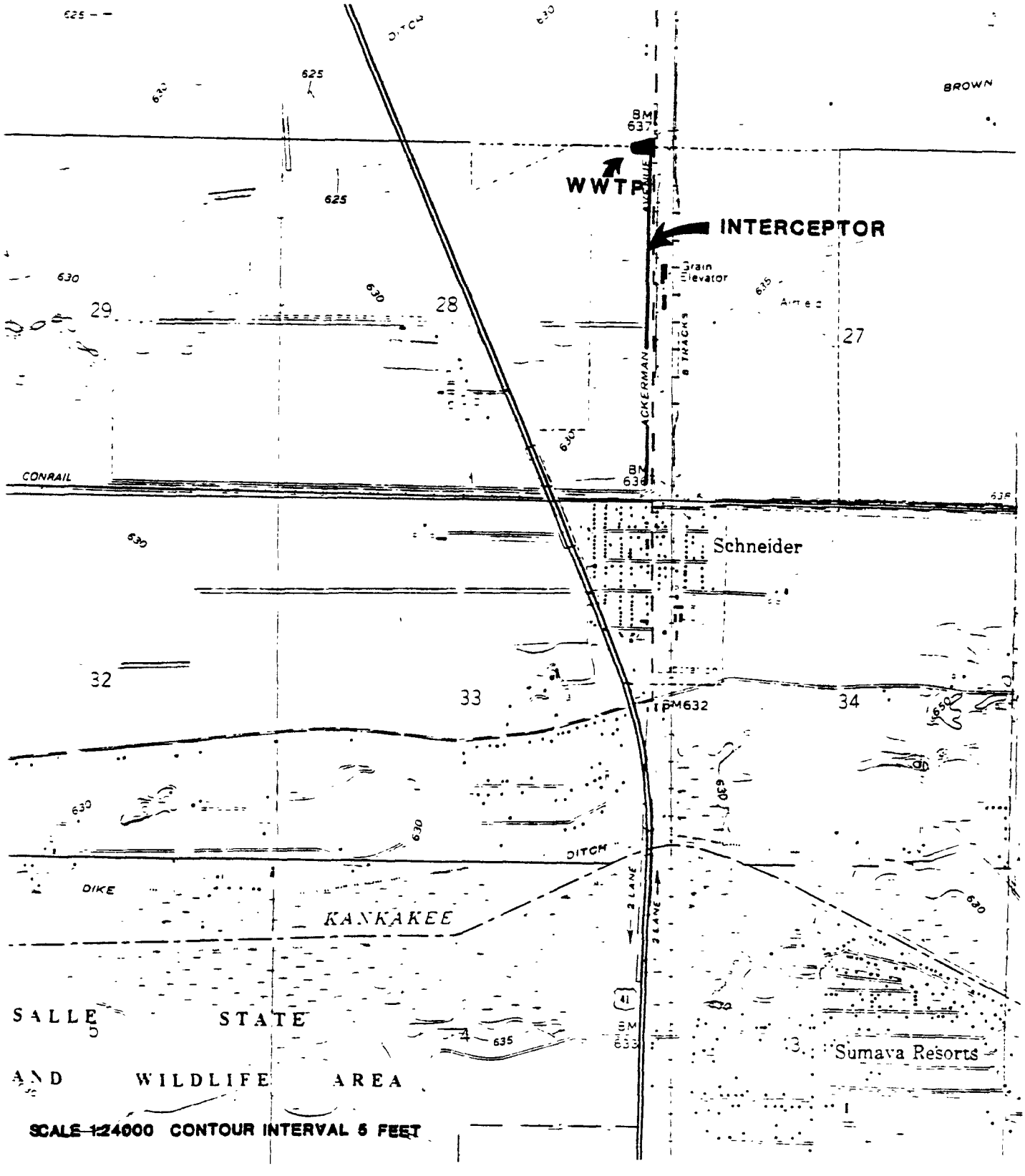
No impacts to wetlands were predicted since no wetlands were located at the site or along the interceptor routes. Field investigation confirmed this prediction.

Summary

The construction of the WWTP and interceptor in a 100-year floodplain appeared to conform to the limitations predicted (acreage used) and mitigations proposed in the 1976 facilities plan. Impacts that may have occurred to the floodplain (as loss of flood storage capacity) are judged to be insignificant in light of the exceedingly flat topography of the general area.

The 1976 NEPA document did not contain a floodplain impact analysis. The 1976 plan preceeded EPA floodplain protection policy (Executive Order 11988, 42 CFR 26951, May 25, 1977; CEQ procedure for implementation of this Executive Order, December 15, 1979) which now requires a Statement of Findings for floodplain impacts. Therefore, it was not possible to compare the accuracy of 1976 predictions (obtained by interpretation) with 1984 observations. If the lack of 1976 floodplain impacts can be assumed to mean that little or no long-term adverse impacts were anticipated, then 1984 obeservations would bear this assumption out.

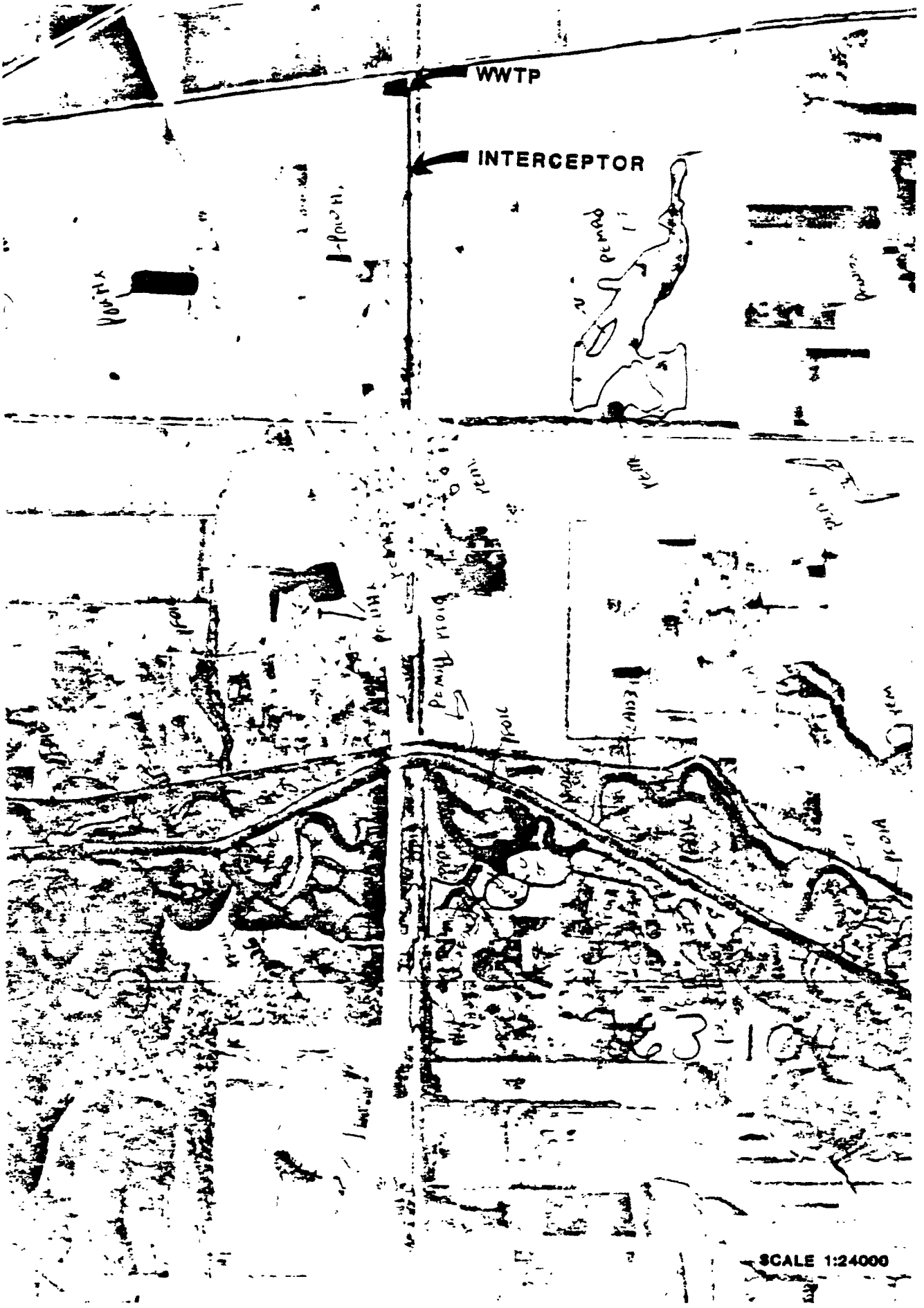
The only recommendation is that contact with the local WWTP operator or manager would have provided first-hand information in the pre-construction environmental setting.



PROJECT LOCATION ON USGS TOPOGRAPHIC MAP

WWTP SITE AND MAIN INTERCEPTOR ROUTE

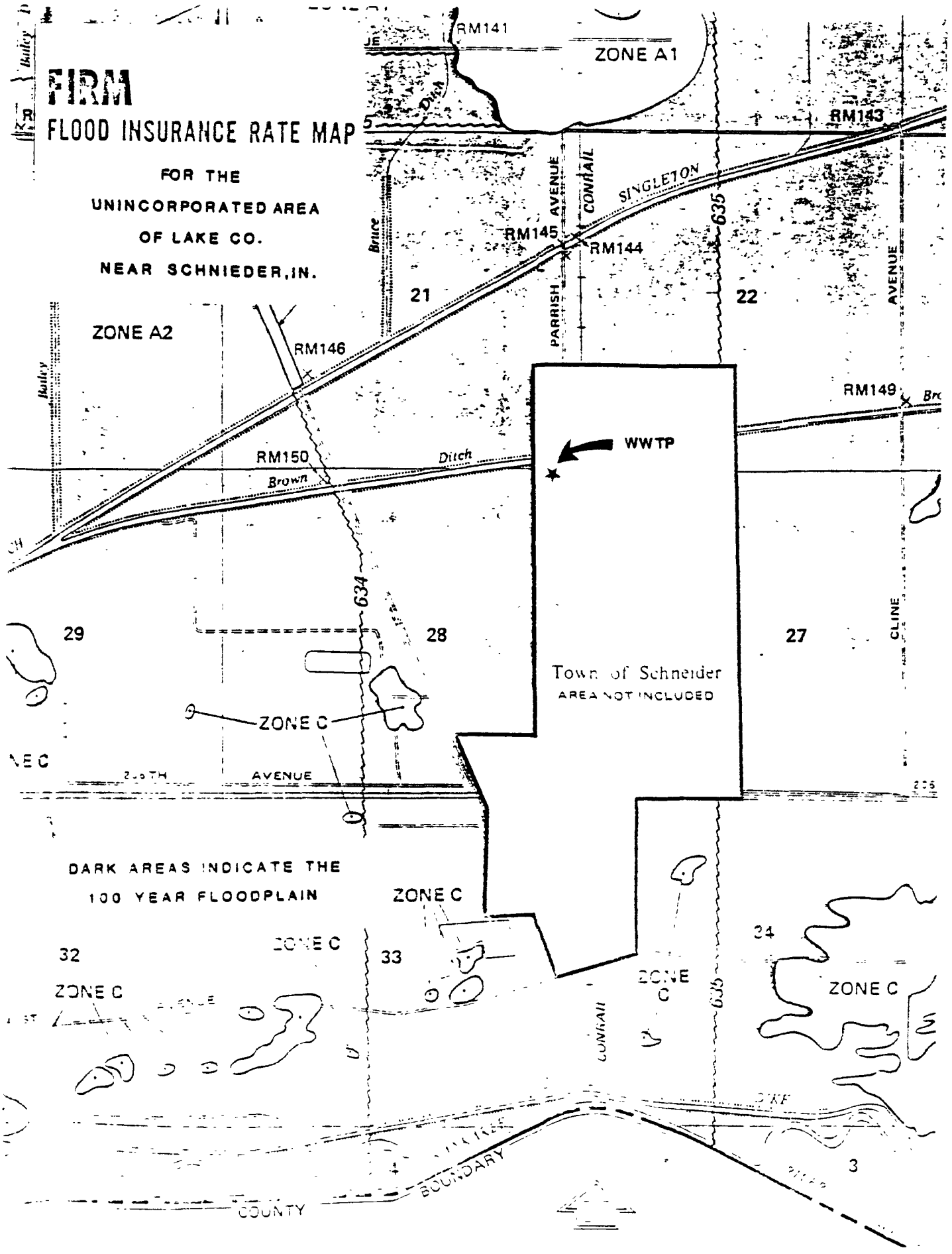
SCHNEIDER, IN

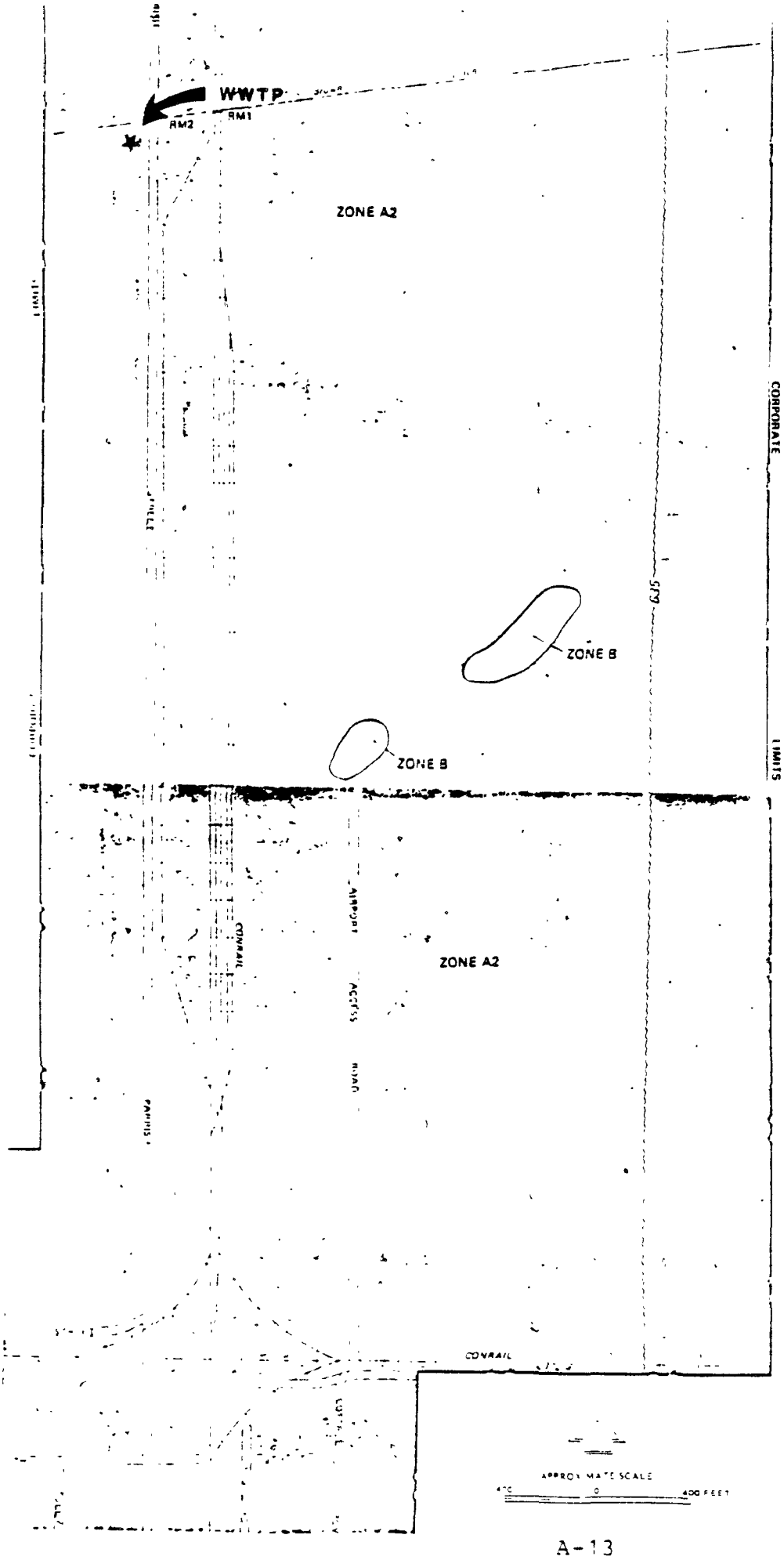


NATIONAL WETLAND INVENTORY MAP DRAFT

WWTP SITE AND MAIN INTERCEPTOR ROUTE

SCHNEIDER, IN


FIRM
FLOOD INSURANCE RATE MAP
FOR THE
UNINCORPORATED AREA
OF LAKE CO.
NEAR SCHNIEDER, IN.
RM141
ZONE A1
RM143
SINGLETON
CONRAIL
PARRISH AVENUE
RM145
RM144
635
AVENUE
21
22
ZONE A2
RM146
RM149
WWTP
RM150
Brown
Ditch
634
29
28
27
CLINE
Town of Schneider
AREA NOT INCLUDED
ZONE C
AVENUE
DARK AREAS INDICATE THE
100 YEAR FLOODPLAIN
ZONE C
32
33
34
3
COUNTY
BOUNDARY
APPROXIMATE SCALE
400
0
400 FEET
PROJECT LOCATION
FOR FLOODPLAIN LEGEND SEE SCHNEIDER FIRM MAP



KEY TO MAP

500-Year Flood Boundary	ZONE B
100-Year Flood Boundary	
Zone Designations* With Date of Identification e.g., 12/2/74	ZONE A1 DATE / ZONE A5 DATE
100-Year Flood Boundary	
500-Year Flood Boundary	ZONE B
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation In Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7 ×
River Mile	• M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet, average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet, base flood elevations are shown, but no flood hazard factors are determined
A1-A30	Areas of 100-year flood, base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood, or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile, or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action), base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action), base flood elevations and flood hazard factors determined.

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
SCHNEIDER,
INDIANA

★ PROJECT LOCATION

APPENDIX A-3

FIELD INVESTIGATION REPORT FOR BRILLION, WISCONSIN (Grant Number 550875030)

Purpose of Study

The purpose of this field investigation was to observe actual construction impacts and any long-term mitigating measures resulting from the construction of new wastewater treatment facilities in Brillion, Wisconsin. The findings from this report form the data base for the aggregate analysis of wetland and floodplain issues.

Scope of Issues (Project Background and Predicted Impacts)

The original WWTP at Brillion, Wisconsin, was built in the 1950's and by the early 1970's, had become overloaded and was no longer able to meet the terms of its NPDES permit. It was determined that a new activated sludge WWTP be constructed at either the then existing WWTP site or at a new location one mile southwest of the City. The site southwest of the City was chosen because the then existing WWTP was located within a 100-year floodplain and there was limited room available for construction and future expansion. The site southwest of the City would be adjacent to the proposed Brillion Marsh Wildlife Area and effluent would be discharged to it.

Expanded service was also proposed for three areas: (1) the area immediately south of the then existing plant bounded by South Glenview Avenue to the west and Vista Court to the south, (2) the area south of Fairway Drive and National Avenue, and (3) a small area approximately 2400 feet west of Brillion along U.S. 10. Figures showing project location and relative position of the project on Wisconsin Wetlands Inventory Map are found at the end of this report.

The Brillion Facility Plan prepared by McMahon Associates, Inc., was submitted to the Mayor of Brillion and the Utility Commission on November 15, 1976. This document was reviewed at the engineer's office immediately prior to conducting the July 24, 1984,

field investigation. The potential impacts were described under Section C of the Facility Plan, "Environmental Effects of Feasible Alternatives". It should be noted that this Facility Plan may not have been the final approved document because the plan recommended either of two sites and either of two possible activated sludge treatment mechanisms. Also, no public comment had yet been received.

Impacts to wetlands and floodplains relevant to the chosen site were not specifically addressed in the Facility Plan. The only associated areas of impact discussed were:

- The new WWTP would occupy approximately five acres adjacent to the proposed Brillion Marsh Wildlife Area. This is a quantitative impact paraphrased from the facility plan.

- The construction of the WWTP at the southerly location would involve the installation of a force main to the plant and three stream crossings with only temporary impacts. This is considered a qualitative impact relative to construction.

- Effluent would be discharged to the proposed Brillion Marsh Wildlife Area (no impact named). This is a qualitative statement.

Methods

Prior to scheduling the field investigation, relevant NEPA documents and other appropriate baseline and/or current data regarding wetlands and floodplains were gathered because the reviewers presumed both sensitive areas were relative to project construction.

- Brillion Quadrangle - USGS Topographic Map, 1974. (SHOWS PRE-CONSTRUCTION DATA)

- FEMA FIRM Maps for City of Brillion and unincorporated areas of Calumet County. (Pertinent panels initially

identified in 1977.) (PRE-CONSTRUCTION DATA)

- USDA - SCS Soil Survey for Calumet and Manitowoc Counties (February, 1980).

- Wisconsin DNR Wetlands Inventory Map, Calumet County (T20N, R20E). Photographed 1966, interpreted, 1979. (PRE-CONSTRUCTION DATA)

- USEPA River Reach File Map containing project area. Requested by latitude/longitude polygon.

On the morning of the field investigation, the reviewers met with Mr. Jeff Kellner of McMahon Associates, Inc., of Menasha, Wisconsin. Mr. Kellner provided (a) the project document and (b) the name of a contact person, Mr. Robert Carey, operator of the Brillion WWTP. McMahon Associates was able to locate the facility planning document for the scheduled visit by the reviewers.

A field investigation was conducted on July 24, 1984. The Brillion WWTP was visited, the site and surrounding areas surveyed both by automobile and by walking where possible. Photographs of the WWTP site, adjacent areas and Black Creek were taken as documentation records.

Findings

The Brillion WWTP has been constructed southwest of the City in the area south of Black Creek and west of State Highway 114. Effluent from the plant is currently discharged directly to Black Creek and not to the marsh. (By personal interview, Mr. William Fritz and Ms. Mary Pavone, ESEI, inc., with Mr. Robert Carey, Operator, Brillion WWTP). The WWTP site was previously utilized for agriculture and confirmed by the aerial photographs in the soil survey. It is immediately east of the Brillion State Wildlife Area, most of which is wetland. The WWTP site appeared, from observation, to be approximately five acres, coinciding with the predicted impact area dimension. The topography of the plant site had probably been graded to accomodate buildings, but did not appear exaggerated when compared to adjacent topography.

Therefore, drainage patterns from the WWTP site northward toward Black Creek and the 100 feet or so of cattail marsh along either side of it have probably not changed significantly since construction. The cattail marsh adjacent to Black Creek appears to coincide with the approximate dimensions of the floodplain for that creek noted on FEMA floodplain maps.

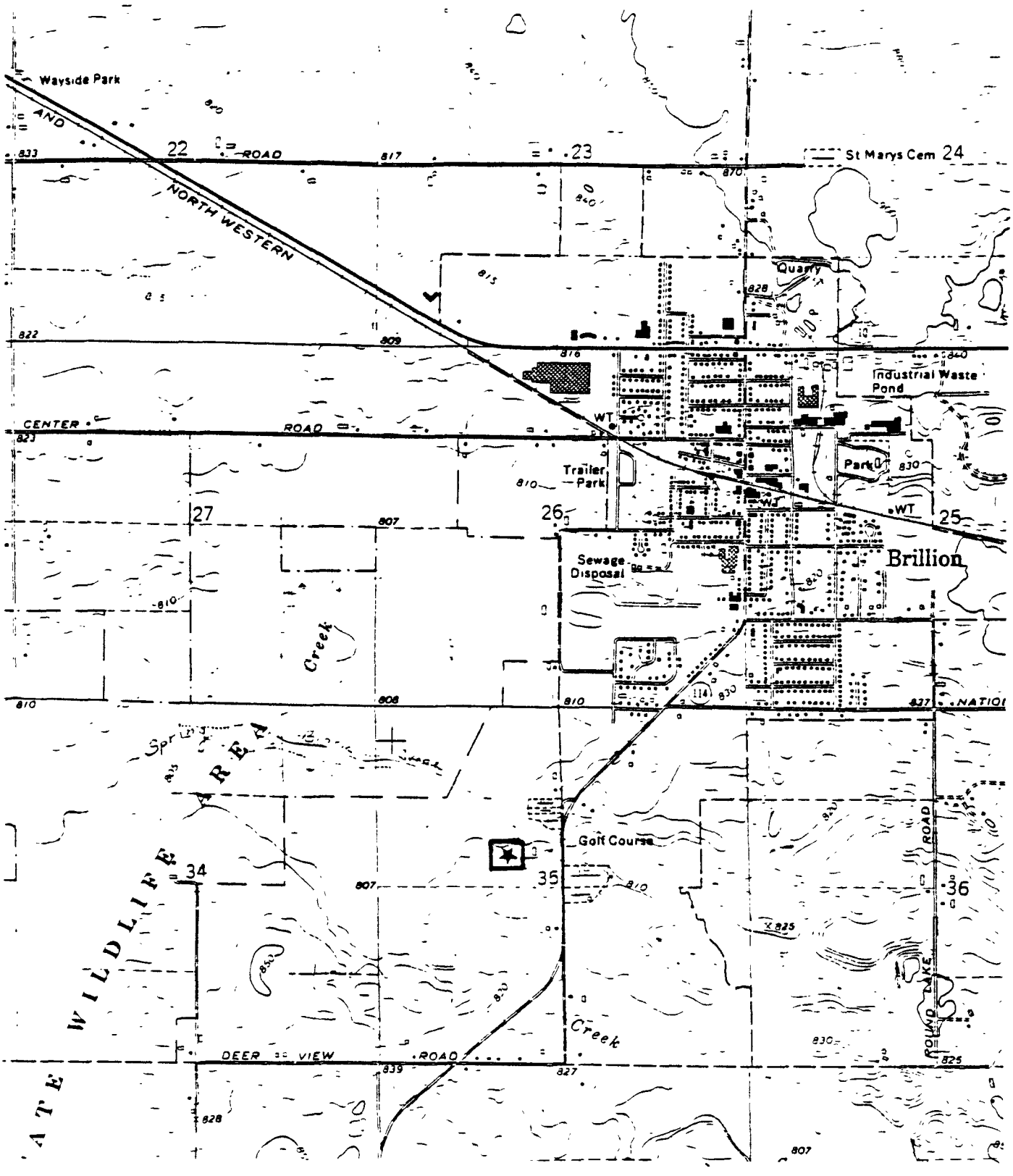
None of the area observed to be occupied by the WWTP is located in wetland areas identified on the Wisconsin Wetland Survey Map nor in the floodplain of Black Creek shown on the FEMA floodplain Map.

No long-term adverse impacts were observed in the area of interceptor stream crossings. Regrowth of natural vegetation had occurred.

Summary

Impacts from construction of the Brillion WWTP adjacent to a wetland/floodplain (of Black Creek) appeared to have no long-term negative effect upon the low wet areas. The WWTP size conformed to the geographic area proposed for construction in the 1976 facilities plan and did not encroach on naturally flooded land.

Because the 1976 document did not specifically address or measure any wetland/floodplain impact categories, no comparisons regarding the accuracy of predictions could be made against 1984 observations.

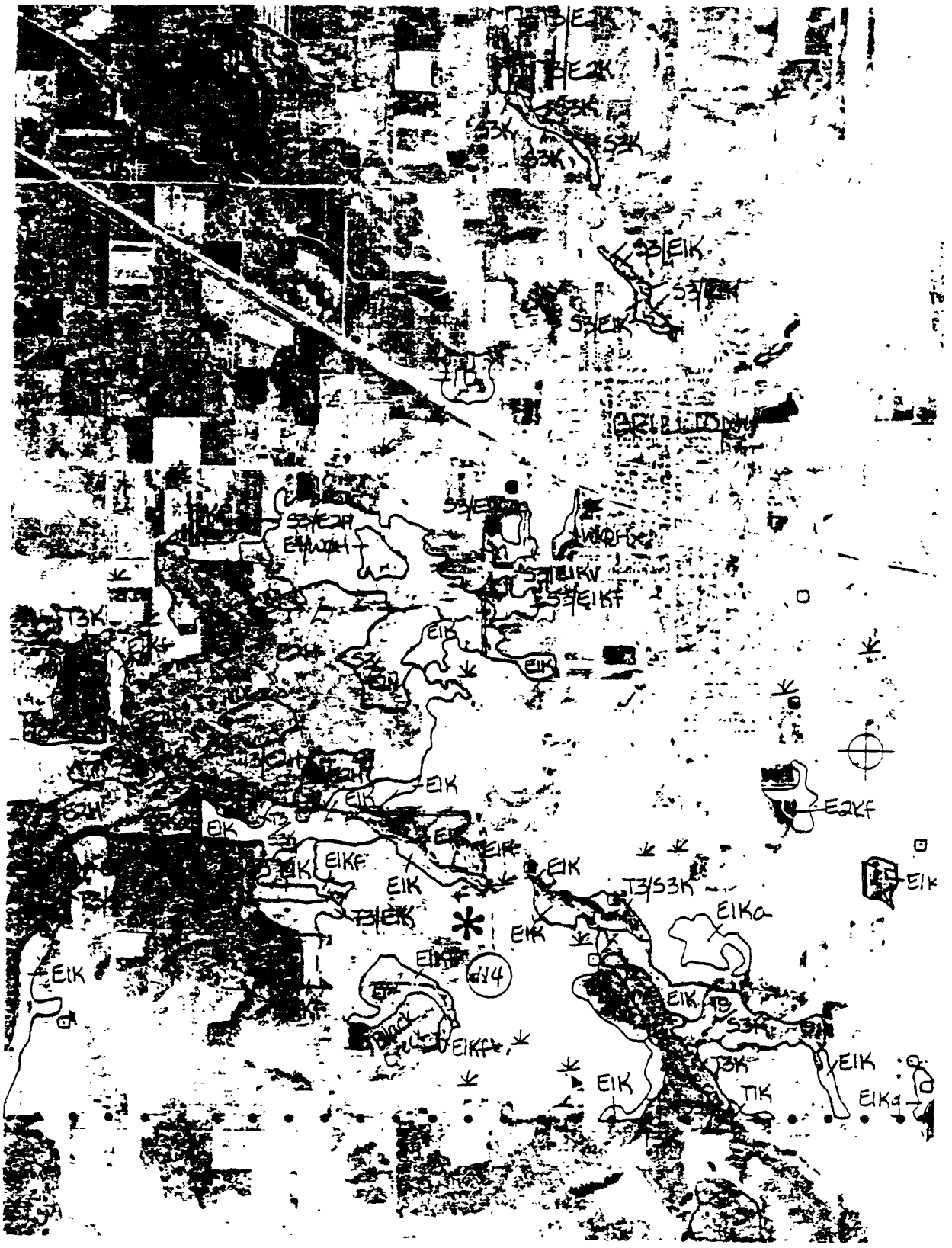


PROJECT LOCATION ON USGS TOPOGRAPHIC MAP

★ WWTP SITE

BRILLION, WI

SCALE 1:24000 CONTOUR INTERVAL 10 FEET

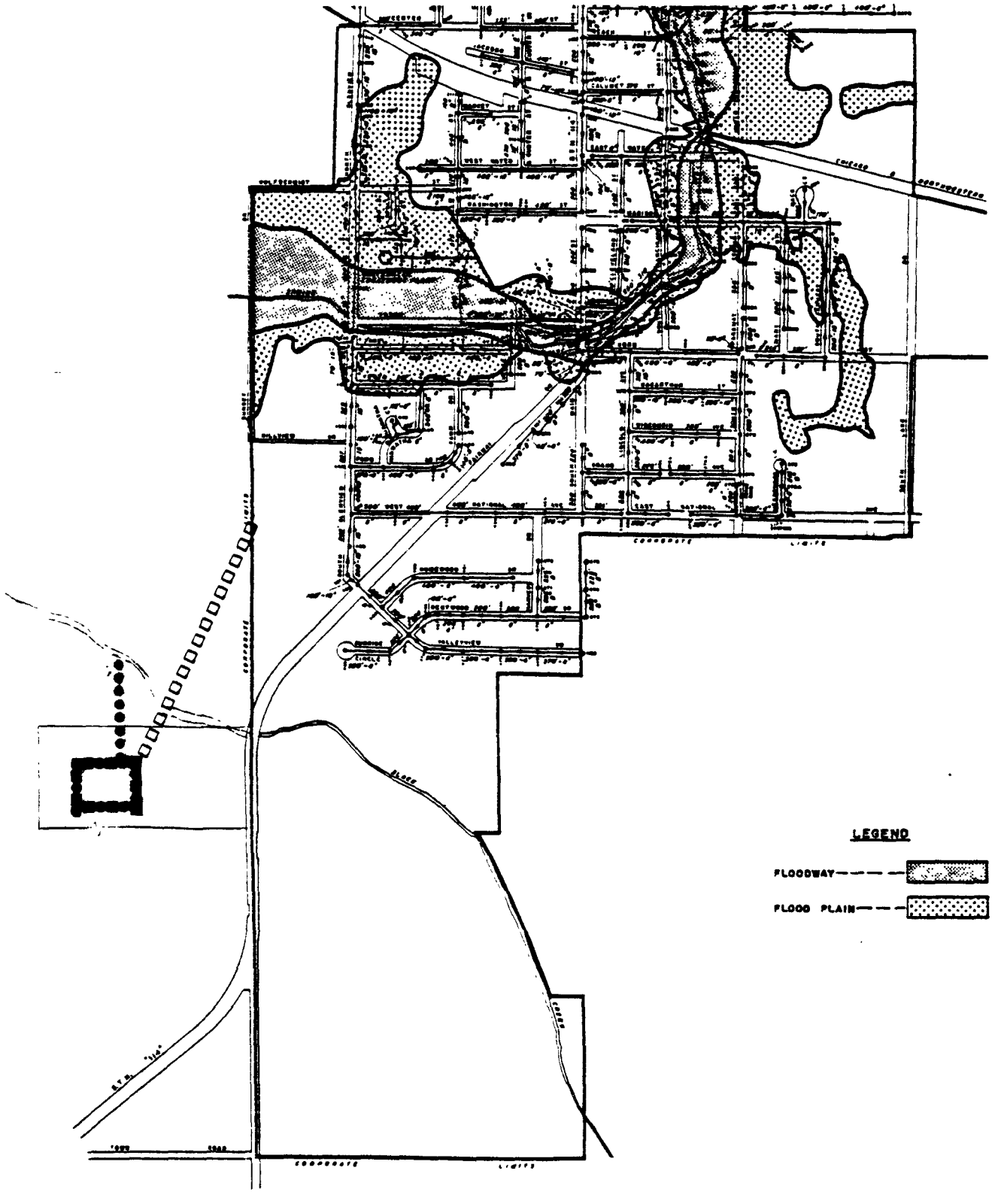


WISCONSIN WETLANDS INVENTORY MAP

✱ WWTP SITE

BRILLION, WI

SCALE 1:24000



BRILLION SITE MAP

WWTP

CITY PROPERTY

FORCE MAIN

OUTFALL

APPENDIX A-4

FIELD INVESTIGATION REPORT FOR MENASHA, WISCONSIN (Grant Number 551275020)

Purpose of Study

The purpose of this field investigation was to observe actual construction impacts and mitigating measures that resulted from the expansion (regionalization) of wastewater treatment facilities and an interceptor in Menasha, Wisconsin. The findings from this report form the data base for the aggregate analysis of wetland and floodplain issues.

Scope of Issues (Project Background and Predicted Impacts)

A regional treatment facility was planned for the Towns of Menasha and Grand Chute, Wisconsin, at the site of the existing Menasha Sanitary District No. 4 (west) WWTP. Wastewater from the Town of Grand Chute (Sanitary District No. 2, formerly the Butte des Morts Utility District) to the north was routed to the new regional WWTP. This new facility was proposed to eliminate several existing water quality problems caused by: (1) the Grand Chute discharge to Mud Creek, (2) the Outagamie Airport package plant discharge to a dry run tributary to Mud Creek, and (3) excessive I/I and wet weather bypassing and overflowing throughout the sewerage system in Menasha Sanitary District No. 4 (west) to Little Lake Butte des Morts (part of Fox River).

The regional plant used portions of the existing (Menasha) treatment works, and, in addition, built a contact-stabilization activated sludge treatment process. This process was chosen because it had the least wetland encroachment of all other alternative processes. The new facility also included construction of a new service building, treatment tanks, clarifiers, and a chlorine contact chamber.

The areas of primary impact for this investigation included an area of swamp (wooded wetland) adjacent and north of the existing WWTP and a river crossing possibly in the floodplain, along the

route of the new interceptor between old Grand Chute and the new Menasha WWTPs.

The proposed project conformed to Federal and state wetland/-floodplain protection policies (according to EPA project summary).

Figures showing project location and relative position of the project on a Wisconsin Wetlands Inventory Map are found at the end of this report.

Several historical planning documents for this service area were available from the consulting engineers, McMahon Associates of Menasha, Wisconsin. The Facilities Plan Amendment for Wastewater Treatment Works, Butte des Morts Utility District and Town of Menasha (West) Sanitary District No. 4 Planning Area 1980 was provided by the engineers prior to field investigation. This document was an amendment to the 1977 Facilities Plan for Wastewater Treatment Works, Butte des Morts Utility District, Town of Menasha Sanitary District No. 4 (West Side) Planning Area which the reviewers looked at in McMahon's offices on July 24, 1984, the day of field investigation.

Environmental impacts in the 1980 facilities plan amendment were considered (by the consulting engineers) to be the same as those addressed in the 1977 document and, therefore, were not repeated. Impacts assessed in 1977 were located throughout that document and are listed below along with some impacts derived from the EPA Project Summary. Sources are identified.

- "Project will involve the modification of the immediate landscape but will not affect the natural drainage of the area." (1977 Facilities Plan). Qualitative impact.

- "Erosion of site (and siltation of river) will be kept to a minimum during construction and will be prevented afterward by maintaining grass cover on all exposed slopes on the site." (1977 Facilities Plan). Qualitative impact.

- "Construction activities will be limited as nearly as possible to the physical boundaries of the proposed project." (1977 Facilities Plan). Qualitative impact.

- The major function of the wetland area to be filled is flood storage within the floodplain of Little Lake Butte des Morts. Loss of this wetland area will not measurably affect the flood elevation of Little Lake Butte des Morts (EPA Project Summary). Qualitative impact.

- The WDNR, USEPA, USCOE and USFWS described the wetland to be filled as primarily a seasonally flooded, Type 7 wetland (wooded swamp). In addition, a portion directly north of the existing site was classified as a seasonally flooded, Type 2 wetland (inland fresh meadow). The wetland loss was estimated to be 1.6 acres (EPA Project Summary). Quantitative and qualitative impact.

- The interceptors will be constructed in floodplain areas. This impact is minimal and does not warrant discussion. (EPA Project Summary). Qualitative impact.

- During interceptor construction, proper drainage will be maintained and site grading in the road right-of-way will minimize wetland encroachment. (paraphrased from 1980 Facilities Plan). Qualitative impact.

Methods

These baseline data (pre-construction) and data updates (post-construction) for the Menasha service area were collected prior to field investigation:

- Neenah Quadrangle - USGS Topographic Map, 1955 (photograph revised, 1975). (PRE-CONSTRUCTION DATA)

- Wisconsin DNR Wetlands Inventory Map, Winnebago County (T20N, R17E), photographed 1966, interpreted, 1979, revised 1983). (PRE-CONSTRUCTION DATA)

- FEMA FIRM Maps for City of Menasha, Wisconsin and unincorporated areas of Winnebago County (pertinent panel initially identified 1977, revised 1982).

- EPA River Reach File Map containing project area. Requested by latitude/longitude polygon.

On the day of the field investigation, the reviewers met with Mr. Jeff Kellner of McMahon Associates, Inc. Mr. Kellner provided the 1977 facilities plan and the contact person, Mr. David Carlson, WWTP operator.

On July 24, 1984, a site visit was made to the newly operational Menasha Regional WWTP. Mr. David Carlson, treatment plant operator, was briefly interviewed in order to understand the plant layout and operation as well as discuss the site description prior to construction.

The visit included a walk around the grounds of the WWTP, noting embankments in the filled area, proximity of the lake and characterization of the wetland area that remains between the lake and the WWTP.

A portion of the 5,490 feet main interceptor route was driven, with observations noted on long-term construction impacts and the proximity of the sewer alignment to low or wet areas. The reviewers observed, at close range, the area where the interceptor crossed Mud Creek on the south side of the Creek. Photographs were taken to visually record observations as well as handwritten notes.

Findings

By observation, the combined area of wooded wetland/fresh meadow that was filled in order to accomodate the regional plant appeared to be about two acres. This estimate is within approximately 20% of the original 1.6 acres predicted. No long-term disturbance of surrounding vegetation in the floodplain was noted.

While the immediate landscape was modified by filling and then grading a steep enbankment (about eight feet high), the natural surface drainage patterns appear to have not been disturbed. Runoff continues to drain to the west across approximatley 20 feet of wooded wetland remaining between the WWTP and Little Lake Butte des Morts. All cleared areas on the plant site have been sodded and, therefore, siltation and/or erosion to the remaining floodplain is minimized.

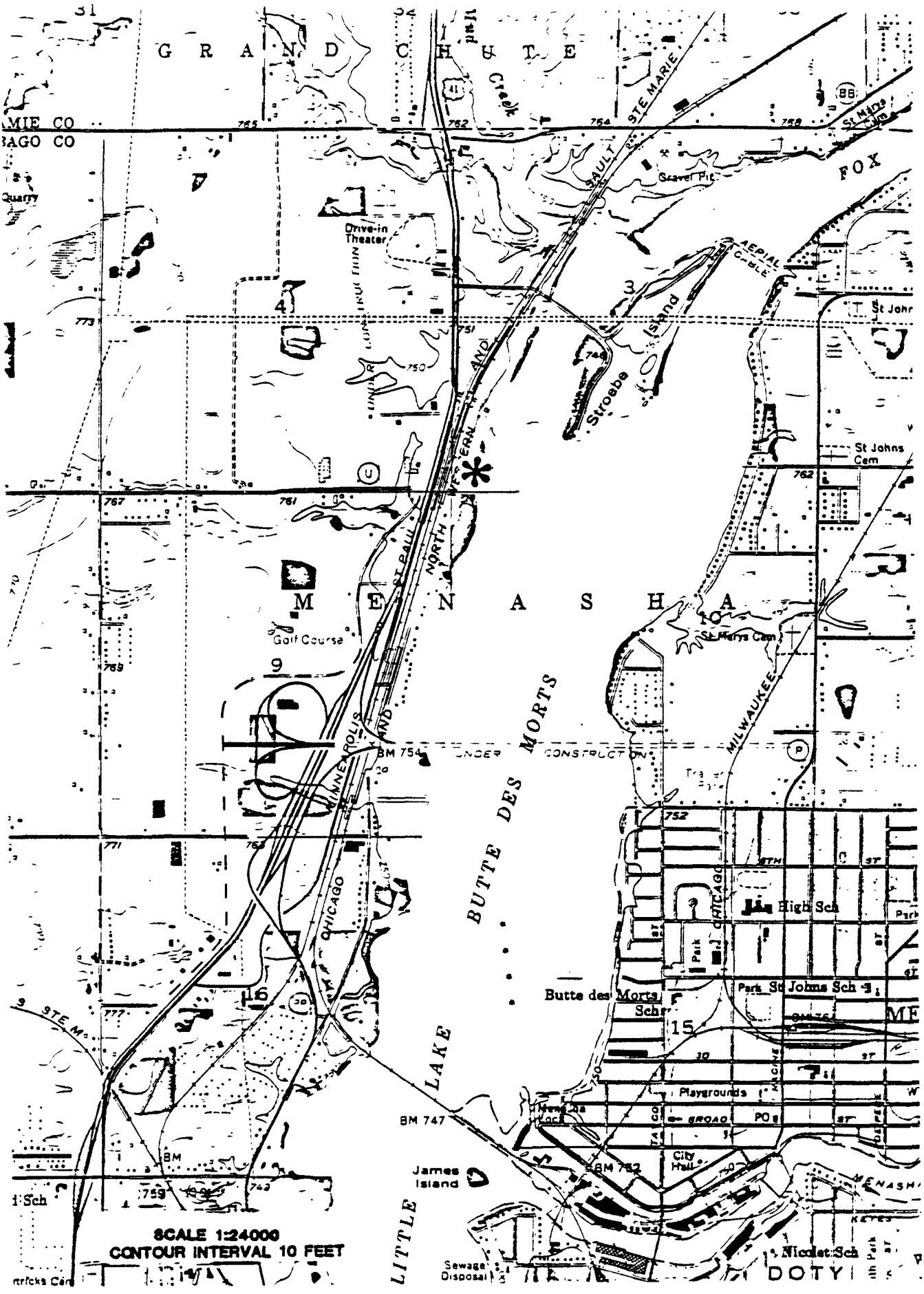
Flood storage capacity over an area of approximately 1.6 to 2.0 acres and a depth ranging from 0 - 8 feet has been lost to the 1300-acre lake which is part of the Fox River. A strip of wooded wetland still exists between the site and the lake and provides water storage capacity in the event of a flood. Additional effort would have been required to quantify this observed impact and verify it with earlier Federal and state approval of the project.

The major part of the 5,490 feet main interceptor did not appear to have any long-term impacts to adjacent wet areas nor was it constructed through any wet areas. The floodplain of Mud Creek that was crossed (tunneled) by the interceptor was noted to be steep sided on the FEMA map and confirmed by observation to be minimal in width. The banks had been seeded but some minor erosion was observed. It was unknown whether this was construction-related or naturally occurring.

Summary

The impacts observed from the expansion of a WWTP into a wetland/floodplain and the construction of approximately one mile of interceptor sewer appeared to conform to the quantitative and qualitative predictions discussed in the 1977 planning document.

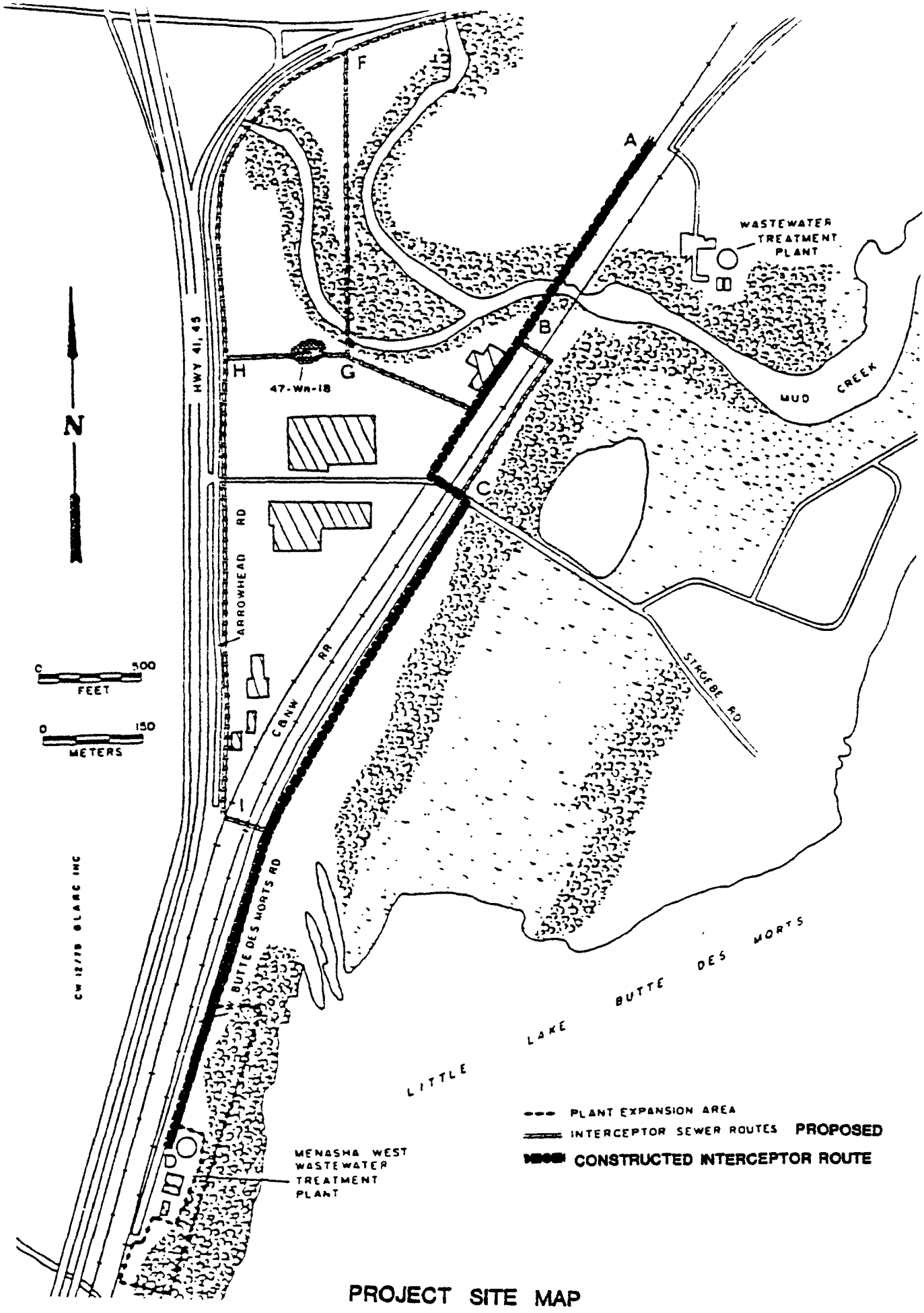
The mitigating measures regarding drainage patterns, erosion and siltation of the floodplain, site grading and site dimensions were observed to be effective in minimizing long-term adverse impacts. The 1984 observations were judged to concur with the facilities planner's intent that any long-term impacts to sensitive areas would be insignificant.



PROJECT LOCATION ON USGS TOPOGRAPHIC MAP

MENASHA, WI

* REGIONAL WWTP



PROJECT SITE MAP

WISCONSIN WETLANDS INVENTORY MAP

✱ REGIONAL WWTP SITE

MENASHA, WI

SCALE 1:24000

APPENDIX A-5

FIELD INVESTIGATION REPORT FOR ORTONVILLE, MINNESOTA (Grant Number 271245002)

Purpose of Study

The purpose of this field investigation was to observe actual construction impacts and mitigating measures that resulted from the construction of wastewater treatment facilities involving a land application of effluent in Ortonville, Minnesota. The findings from this report form the data base for the aggregate analysis of wetland and floodplain issues.

Scope of Issues (Project Background and Predicted Impacts)

In the late 1970's, the existing wastewater treatment system for the City of Ortonville was unable to meet its new stringent effluent limitations. A 1979 Facilities Plan for the City of Ortonville, prepared by Ellerbe Associates, Inc., selected a land application system consisting of stabilization ponds and spray irrigation as the most cost-effective and environmentally sound alternative for upgrading wastewater treatment. After consideration of several specific locations for the site operation, the final site agreed upon for the ponds and spray irrigation system was located southeast of the City in parts of Sections 14, 15 and 23 (T12N, R46N) in agricultural land. Wetlands within the proposed land areas were identified by the USFWS in 1979, totaled approximately 20 acres and included wetland Types 1, 2, 3, and 4 (classified by the USFWS system, Circular 39). The final site selection met with the approval of all agencies involved. The USFWS stated that the project conformed to Executive Order 11990 on wetlands protection.

Figures showing the project site location are found at the end of this report.

The facilities planning effort produced two documents: Wastewater Treatment Facilities Plan - City of Ortonville, Minnesota (May, 1979) and Facilities Plan Supplement Land Application of

Wastewater - City of Ortonville, (December, 1979) which were reviewed for predicted impacts.

The main document of the facility plan did not specifically address impacts to wetlands. This document preceded official publication of wetland protection implementation procedures (December, 1979) but through agency negotiations during planning it was agreed that the project conformed to the Executive Order 11990 (on wetlands protection). The document did include a statement of no significant adverse impacts to existing wildlife or vegetation in the vicinity of the project. This may be interpreted to mean that hydrologic regimes or topography will not change enough to have a significant adverse impact on the existing biota and habitat.

Specific adverse impacts were quantified by the USFWS to wetland habitats in the proposed site by acreage, wetland type, and number of wetland sites. As a result of this specific wetland impact analysis, modifications to the site layout were negotiated. From correspondence between Ellerbe Associates and the USFWS found in the Facilities Plan Supplement, Appendix A, the following wetland impacts and/or mitigating measures were extracted by paraphrasing:

- The 80 acres required to construct four stabilization ponds and access roads currently in cultivation are in the N-1/2, NW-1/4 of Section 23 and a small part of NE-1/4, NE-1/4 of Section 22. Construction in this area would have a very minimal effect on natural wetland basins but may encroach into a long, narrow Type 3 wetland located to the south of the proposed site. Qualitative impact.

- The north, 120 acre irrigation field (located in the S-1/2, NW-1/4 and the NE-1/4, NW-1/4 of Section 14) is in private ownership but the USFSW has perpetual waterfowl management rights over this land. Within this 120 acre are 30 wetland basins, totaling 18.6 acres, predominately Type 1 wetlands with one Type 4 wetland in the extreme SE corner of the NW-1/4 of Section 14. Ortonville may use these 120 acres for spray irrigation with a wetland easement from the USFWS. The easement does not permit

burning, filling, or draining any of the wetland basins within the 120 acres. Mitigating measures.

Methods

Prior to scheduling the field trip, the two-part Facilities Plan was obtained directly from Ellerbe Associates.

In addition, other baseline data was collected:

- Ortonville Quadrangle - USGS Topographic Map, 1971 (PRE-CONSTRUCTION DATA)

- USFWS National Wetland Inventory Map for the area. Incorrect maps sent. Appropriate maps then requested through NCIC would take an additional 4-6 weeks.

- FEMA FIRM Maps for City of Ortonville and unincorporated areas of Big Stone County, Minnesota. (Effective date, 1981. No other date on maps.)

A one-day field trip was conducted July 27, 1984. On that day, the reviewers contacted Mr. Roger Anderson, Water Department Supervisor, in Ortonville who allowed the reviewer access to the site and discussed changes that had been made to the site layout as described in the original Facility Plan. Mr. Anderson was also helpful in describing aspects of the spray irrigation operation that were not necessarily addressed (or known) at the time of facilities planning. For example, very little effluent may actually be sprayed in 1984, because of summer evaporation rates and the small volume of effluent collected. The two reviewers walked around the stabilization ponds noting wet areas adjacent to city property and drove along the main access road to observe the spray irrigation fields noting wet areas both within the proposed irrigation areas and adjacent to the property. Photographs were taken where appropriate to document the nature and extent of marshy areas.

Findings

The site layout appeared to coincide with the stated acreage required in the Facilities Plan. The pond system had only been on line for two weeks and test spraying was scheduled for mid-August, 1984. All four ponds contained some wastewater; two with secondary effluent and two with primary wastewater. The depth of the effluent was not more than several feet.

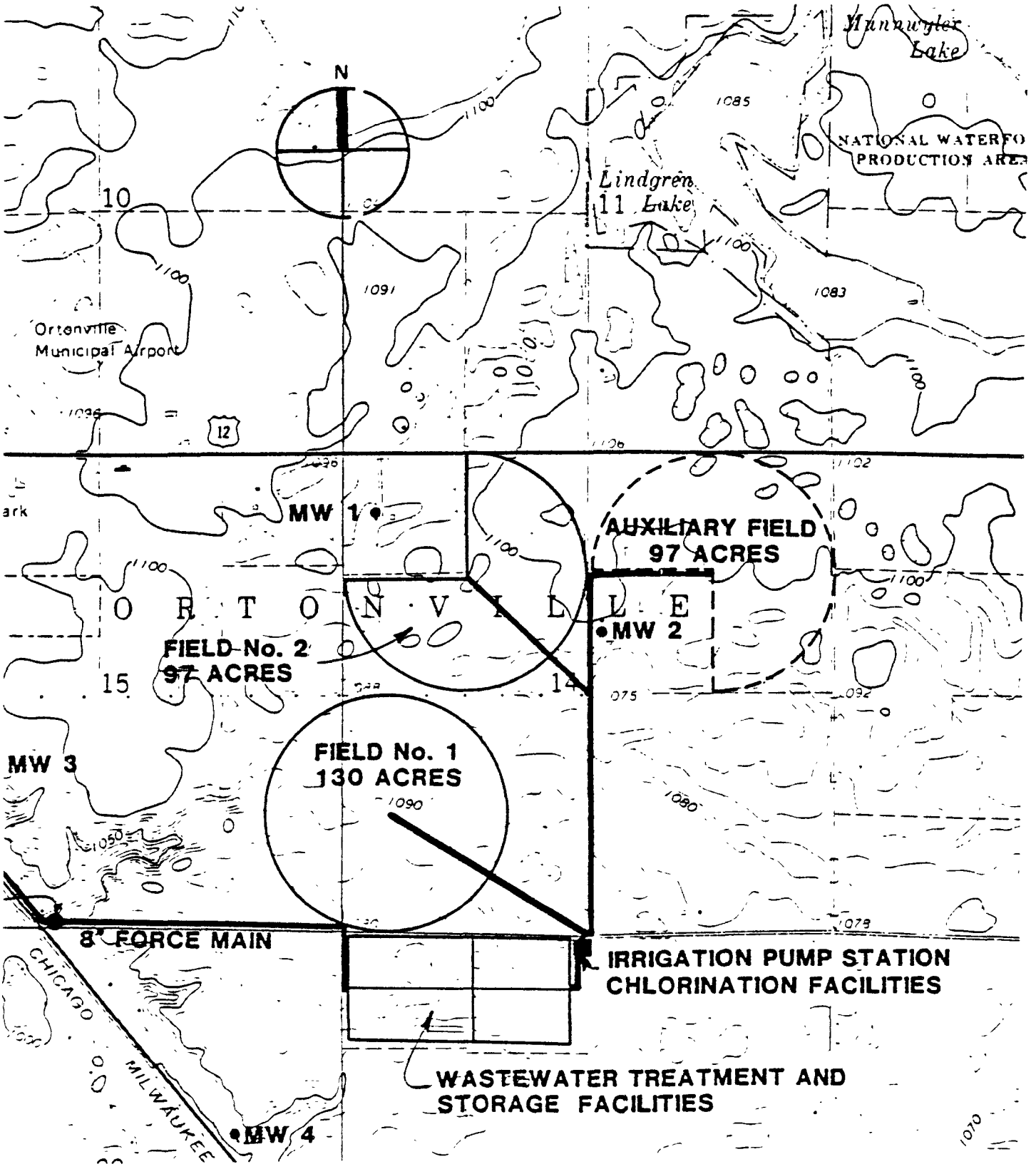
The elongated, Type 3 wetland (shallow fresh marsh) adjacent to the southern border of the ponds was observed to have some open water. Runoff from the embankment around the ponds contributes to this marsh. While this is an unanticipated impact, it is apparently beneficial in that it provides a more permanent marsh environment than might have previously existed. The reviewers were not able to determine if the estimated one-acre marsh was any smaller than pre-construction time.

All other major wet areas identified and documented by the USFWS and also derived from a 1979 aerial photograph in the Facilities Plan were observed to still exist within the proposed irrigation areas. There appeared to have been no filling of any low, wet areas within the irrigation circles. Many of the "wetland basins" identified by the USFWS were dry during the late July field trip, but nevertheless, undisturbed.

None of the project sites were found to be within FEMA identified floodplain areas. Observations confirmed previous documentation.

Summary

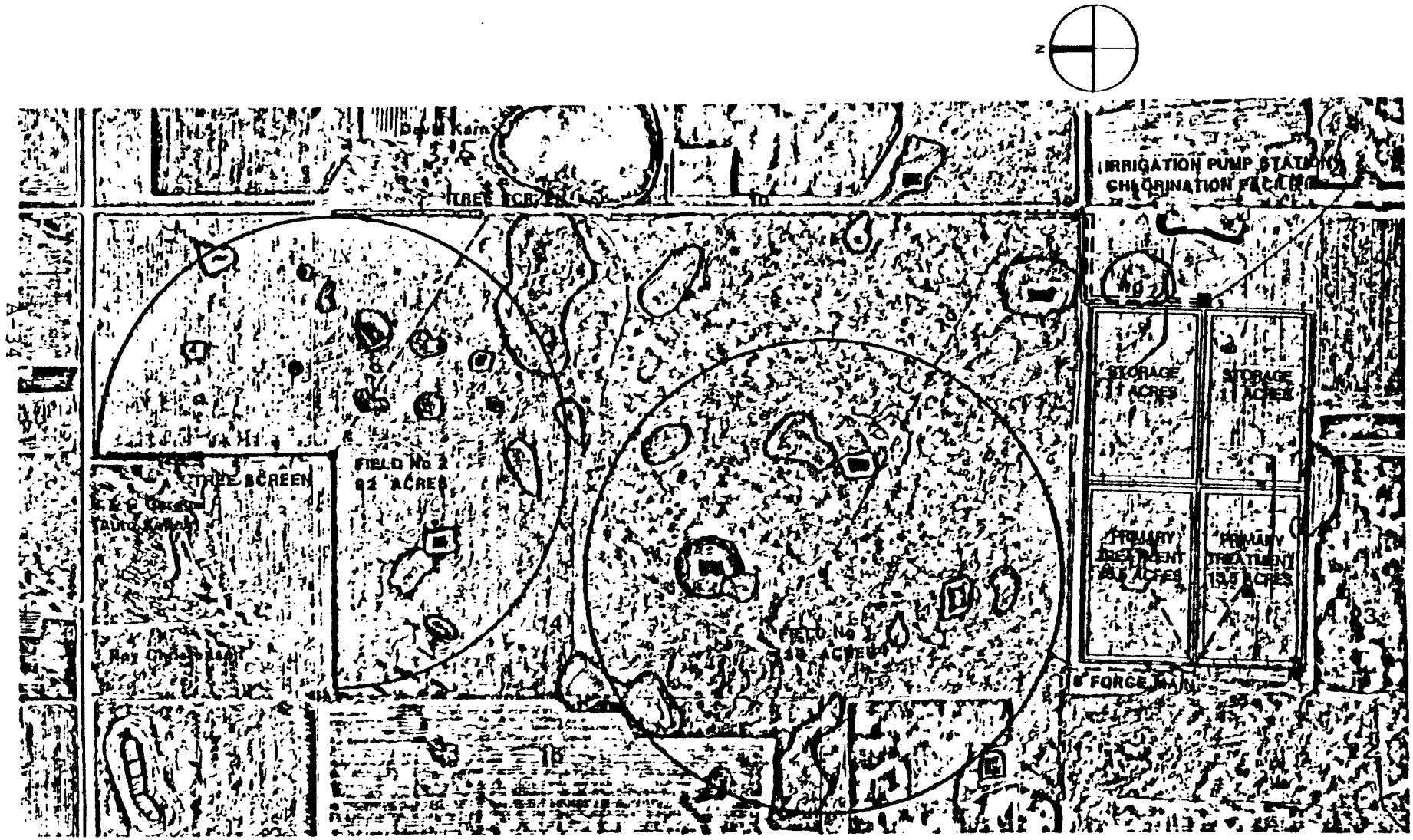
Observed impacts to wetland areas within the project site, as well as mitigation measures, appeared to have been predicted accurately.



PROJECT LOCATION ON USGS TOPOGRAPHIC MAP

CONTOUR INTERVAL 10 FEET SCALE 1:24000

ORTONVILLE, MN



AERIAL PHOTOGRAPHY
NOVEMBER, 1979

SITE LAYOUT
LAND APPLICATION SYSTEM
ORTONVILLE, MINNESOTA

USFWS NATIONAL WETLANDS INVENTORY MAP

ORTONVILLE,MN

AN ADDITIONAL 4-6 WEEKS NEEDED TO ORDER MAPS THROUGH NCIC

APPENDIX A-6

FIELD INVESTIGATION FOR
CUYAHOGA VALLEY INTERCEPTOR PROJECT, OHIO
(Grant Numbers 391126030 - 391126070)

Purpose of Study

The purpose of this field investigation was to determine direct building impacts, including any mitigating measures, of wastewater conveyance facilities to wetlands and floodplains immediately along and adjacent to interceptor and trunk sewer routes. The findings from this report form the data base for the aggregate analysis of wetland and floodplain issues.

Scope of Issues (Project Background and Predicted Impacts)

The proposed project consisted of the development of an interceptor designed to convey wastewater generated in the corridor between Cleveland and Akron to the Cleveland Southerly WWTP. This system eliminated numerous discharges and septic systems throughout the Cuyahoga River Basin and provide advanced treatment at the Cleveland Southerly WWTP, thus, improving water quality in the Cuyahoga River.

The wastewater conveyance system consisted of a tunneled interceptor paralleling the B&O railroad on the west side of the Cuyahoga River. The Cuyahoga Valley Interceptor (CVI) intercepted flow from several trunk sewers and discharge into a lift station at the Southerly WWTP. The 168 MDG interceptor is seven miles long and runs from the lift station to the Brecksville WWTP. Tunnel construction was employed to reduce or eliminate severe, long-term environmental impacts. The trunks involved both tunnel and open cut construction but were predominately open cut. Trunk alignments were located along roadways and easements throughout the service area leading to the main line in the Cuyahoga Valley.

Seventeen access shafts were incorporated into the CVI which provide input points for the trunks, as well as maintenance access. Trunks crossing the Ohio Canal and Cuyahoga River were tunneled along with the main line. Figures of the routing,

impact areas, and U.S. Fish and Wildlife National Wetland Inventory Maps are found at the end of this report.

The identification of predicted building impacts to floodplains and wetlands involved a review of the Environmental Assessment (EA) for the CVI (Havens and Emerson, October 1975, prepared for the Cleveland Regional Sewer District) and the EIS for the CVI, Cleveland Regional Sewer District (CRSD) (EPA, Region V, September 1976). Building impacts to wetlands and floodplains were not specifically addressed in the EIS. A detailed review of the complete EIS, including comment letters, however, was needed to identify various references to wetlands and floodplains. A more detailed discussion of potential wetland and floodplain impacts was presented in three sections of the EA, Volume I, Chapter IV, of the Proposed Action; Chapter V, Effects of the Proposed Action; and Volume 2, Appendix D, the Archeological Field Study. In most cases, existing conditions of wetland or floodplain areas were described rather than an assessment of predicted impacts to these areas.

Potential impacts to floodplains were only discussed in terms of potential impacts to water quality in the floodplains (e.g., short-term increased turbidity from construction) or disturbances to the aquatic or terrestrial biota within the floodplain (e.g., loss of vegetation resulting from construction activities). No potential changes in the actual floodplain size or boundaries were noted. Because the objective of this investigation was focused on the building impacts to wetlands and floodplains the aquatic and terrestrial biota and water quality impacts were not investigated. It was further assumed that the absence of predicted construction impacts to floodplains implied there would be no change in indirect impacts to floodplains (water quality, biota) resulting from construction activities.

Information obtained from the EA and EIS regarding wetlands is presented below. Sources are identified. As previously discussed, wetland information was usually discussed without an assessment of potential impacts.

Tunnel construction requires access shafts where surface disruption is apparent and will require an area about 1 to 2 acres for equipment, storage and work space during tunneling. (Quantitative, EA pgs. 132-133, EIS pg. 5-4).

Access Shaft #3 - A small portion of the wet area will require fill (Qualitative, EA, pg. 133, and Archeological Survey pg. 5). The area at site #3 was changed to minimize damage to a wetland. A portion of the wetland will still be modified but the modification is minimized and consolidated at one edge of the wet area. (Qualitative, EA pgs. 147 and 159)

Access Shaft #5 - A small, marshy wet area lies to the north and east of the site. (Qualitative, no prediction, EA pg. 134 and Archeological Survey pg. 7)

Access Shaft #8 - Much of this area lies in a marsh at the foot of the valley wall, although the location of the access shaft is on the slope of the hill. (Qualitative, no impact implied, EA, Archeological Survey pg. 8)

Access Shaft #13 - Was within a wetland area south of Pleasant Valley Road. The site and Walton Hills Trunk were moved to a clearing on fill closer to the road. (Qualitative, no impact implied, EA pgs. 135 and 160)

Access Shaft #15 - Was located in a frequently inundated area of swamp-type forest. The site was moved south to a higher and drier area. Additional easements are now provided east of the alignment in a drier area. (Qualitative, EA pgs. 135 and 160, and Archeological Survey pg. 12)

Access Shaft #16 - The shaft is located on a somewhat elevated area between two old river channels that are now wetlands. The access is now provided west of the tunnel between the wetlands and Sanitary Road. The proposed access will cross a small portion of wetland at Sanitary Road which will be temporarily filled. (Qualitative, EA pgs. 135 and 160, and Archeological Survey, pg. 12, EIS, pg. 5-4)

Access Shaft #17 - The site is located in a wet area created by Sanitary Road and contains a small willow thicket. The presence of cattails and willows attest to the constant swamp conditions. A portion of the wetland close to the Brecksville Shaft will be affected. (Qualitative, EA pgs. 136 and 148, Archeological Survey pg. 12, EIS page 5-4)

Access clearing after construction will be much smaller than the construction area required to build the shafts and will include only a 12' x 15' concrete pad and manhole cover at grade. (Quantitative, EA pg. 149)

Several of the access shafts along the interceptor have been moved to avoid wetland areas. However, we suspect that the tunnel construction may have a draining effect and dewater adjacent wetlands. (Qualitative, EIS, U.S. Department of the Interior, comment letter pg. 7-65)

In addition to the predicted impacts, the documents were reviewed for potential unanticipated impacts. These potential impacts were discussed in the EA and in comment letters of the EIS. Two unanticipated impacts were identified and are described below.

Lowering of the water level will drain some of the normally flooded wetlands... (Qualitative, EIS, Illinois Wildlife Federation, comment letter pgs. 7-83 and 7-84)

It should be noted here that in tunnel construction, there is always the risk of equipment problems in the tunnel which could require an additional shaft. It is impossible to predict if and where such a problem would occur. In such a case, the disturbance of another area of 1 to 2 acres would occur and could adversely affect a portion of prime forest or wetland. (Qualitative, EA pg. 142-143)

General draining or dewatering of wetlands. (Qualitative, EIS, U.S. Department of the Interior, pg. 7-65, and Illinois Wildlife Federation, pgs. 7-83 and 7-84)

Methods

Baseline data requested prior to the field investigation of the interceptor and trunk sewer routings and access shaft locations included:

Hudson, Aurora, Broadview Heights, Cleveland South, Northfield, Peninsula, Shaker Heights and Twinsburg Quadrangles - USGS 7.5 minute Topographic Maps.

Hudson, Aurora, Broadview Heights, Cleveland South Northfield, Peninsula, Shaker Heights and Twinsburg Quadrangles - USGS Floodprone Area Maps (developed on 7.5 minute topographic base maps). (1963, photo revised 1970) (PRE-CONSTRUCTION DATA)

Soil Survey of Cuyahoga County, Ohio (December 1980). Source: Cuyahoga and Lake Counties, Soil and Water Conservation Districts. (POST-CONSTRUCTION DATA)

Soil Survey of Summit County, Ohio (November, 1974). Source: Summit Soil and Water Conservation District. (PRE-CONSTRUCTION DATA)

FEMA FIRM MAPS for the incorporated and unincorporated areas of Cuyahoga County and the unincorporated areas of Summit County. (effective 1981) (POST-CONSTRUCTION DATA)

Environmental Impact Statement, Cuyahoga Valley Interceptor, Cleveland Regional Sewer District, EPA, September 1976. Source: EPA, Region V.

Environmental Assessment, Cuyahoga Valley Interceptor, October 1975, Havens and Emerson, Ltd., prepared for the Cleveland Regional Sewer District. Source: EPA, Region V.

USFWS National Wetlands Inventory Maps for Cleveland South, Shaker Heights, Chagrin Falls, Twinsburg and Northfield Quadrangles, March, 1977. (PRE-CONSTRUCTION DATA)

Items 2, 6, and 7 were received prior to the actual field investigation. Items 1, 3, and 4 had arrived by the conclusion of the field investigation. However, the remaining items required a minimum of 4-6 weeks from date of order to receipt. A review of available baseline data prior to the scheduled field investigation was conducted.

A review of the NEPA documents revealed data deficiencies in the identification of baseline wetlands/floodplains for the project area. USFWS Maps and Soil Surveys were ordered to supplement this data deficiency. No new post-construction wetland/floodplain data had been developed and, therefore, identification of actual impacts required on-site field studies.

Arrangements for two investigators were made to conduct a field study during the period July 19 and 20, 1984. Mr. Donald Shaver, Construction Supervisor for the Northeast Ohio Regional Sewer District (NEORSD) was contacted prior to conducting the field study. Mr. Shaver agreed to accompany the two investigators to assist in access shaft site identification and trunk sewer location identification. Mr. Shaver provided information concerning the site conditions before construction began, the existing conditions, and any planned future site modifications. Mr. Shaver also provided the investigators with invaluable background information regarding the construction process and any required construction modifications during the project.

Because of tunnel construction, the CVI was inaccessible except at those locations surrounding the access shafts. Each access shaft was visited and visually inspected. Field notes and photographs were taken to record the site conditions. The pre-construction site condition was provided by Mr. Shaver along with other explanations as appropriate.

Trunk sewer inspections were conducted using automobile surveys. The entire length of each of the trunk sewers developed as part of the CVI, Phase I project, was inspected by the investigators. As with the CVI, Mr. Shaver provided invaluable insight concerning the pre- and post-construction sites and construction activities, as well as additional future site work. In all cases, the

investigators looked for evidence of unanticipated impacts to wetlands or floodplains.

Upon conclusion of the field studies, all documents received after the investigations were reviewed to determine any differences between data obtained in the course of the investigations and data presented in the documents. Interceptor and trunk sewer routings and access shafts were located on the USFWS National Wetlands Maps to determine any potential impacts to these identified wetlands.

Findings

Building Impacts to Floodplains - As previously discussed, it was assumed that, due to the absence of predicted changes in floodplains, this implied a prediction of no impacts. ESEI's field investigation could find no evidence of change in the floodplains. Much of the mitigation of potential impacts to floodplains resulted from the use of tunnel construction methods.

Wetland Impacts/Predicted Impact Findings - The findings of the field investigations regarding wetlands are described first in terms of the predicted impacts and then any unanticipated impacts.

Access Shaft #3 - Access to shafts 3, 4, and 5 was from an old road paralleling the B&O Railroad between Highway 17 and Rockside Road. The access road was originally constructed by the Cleveland Electric Illuminating Company (CEI) to provide access for the construction and maintenance of numerous utility poles in the area. The area west of the river is marshy area. The area had been previously modified by the CEI road and by the B&O Railroad which had brought fill back to the area to deposit at and alongside of the railroad. (By interview, Mr. Donald Shaver, NEORSD, to Ms. Mary Pavone and Mr. William Fritz, ESEI, inc.) Also noted was that an area of approximately two acres around the access shaft #3 had been covered with tunnel construction debris from a depth of approximately 4 to 6 feet beginning approximately 100 feet west of the River to a depth of 1 to 2 feet at the B&O Railroad. Vegetation to the north of the site provided evidence that

at least a portion of the area was previously a wetland. Due to the absence of baseline data and problems with the scale of wetlands mapped on the National Wetlands Inventory Maps, it was not possible to accurately determine the extent of the wetlands affected. According to Mr. Shaver, the land is privately owned by a Mr. Vinney who requested the wetland be filled around the access shaft. Mr. Shaver estimated approximately 1 to 2 acres of wetland were filled. The EA predicted "a small portion of the wet area will require fill".

Access Shaft #5 - This access shaft is currently under construction. There is no evidence that the immediate site area was previously a wetland. To the north of the site there is a small (approximately 1/4 acre) marshy area with cattails as the dominant vegetation. The Valley View Trunk No. 1 joins the CVI access shaft #5 here from the east. Spoil material from the construction of manholes to the Valley View Trunk No. 1 was deposited in a wetland area immediately south of the Valley View manholes. Mr. Shaver explained that this land was also owned by Mr. Vinney and that he requested the spoil be deposited in the wetland area. Visual examination of the wetland shows an area of approximately 10-15 acres to have already been filled to a depth of 6 to 8 feet with slag debris from other sources. According to Mr. Shaver, the landowner is interested in developing the area on the west side of the Cuyahoga River between Rockside Road and Highway 17 and has been actively engaged in filling the wet areas in this strip of land for some time.

Access Shaft #13 - The proposed mitigation measure for access shaft #13 was to move the site to a clearing on fill closer to Pleasant Valley Road. A site visit verified that this mitigation measure had been implemented. This area had originally been filled and regrading of the access shaft site conformed to the original grade. (By interview, Mr. Donald Shaver, NEORSD, to Ms. Mary Pavone and Mr. William Fritz, ESEI.) The surrounding wetland areas to the west and south of the access shaft previously referenced in the EA were still apparent during the site visit of July 19, 1984.

Access Shaft #15 - The on-site field investigation of July 20, 1984, verified that the proposed mitigation measure of moving the site location from a swamp-type forest to a drier area to the south had taken place. An area of approximately 1-1/2 acres surrounding the access shaft had been filled to a depth of between 1 to 3 feet of construction debris from the tunnel. Construction debris was also used to construct an access road from Sanitary Road to sites #15 and #16. According to Mr. Shaver, reseeding and regrading will take place some time in October, 1984. At this time, all excess fill will be removed and each site and the areas impacted by the access road will be regraded to the original contour. (By interview, Mr. Donald Shaver, NEORSD, to Ms. Mary Pavone and Mr. William Fritz, ESEI).

Access Shaft #16 - Access shaft #16 was similar to access shaft #17 in overall appearance and impact. Approximately 1-1/2 to 2 acres surrounding the shaft had been filled with construction debris. As previously described, this material will be removed at a later date (See Access Shaft #15 discussion). Based on the field investigation of July 20, 1984, the site appears to be located on the elevated area between two old river channels as proposed in the EA.

The access road to sites #15 and #16 resulted in filling of a portion (approximately 50' x 20') of wetland near Sanitary Road. This material will be removed prior to reseeding at the conclusion of the construction contract.

Access Shaft #17 - A field investigation of July 19 and 20, 1984, located access Shaft #17 immediately south and adjacent to Sanitary Road and west of the Brecksville WWTP. The area is characterized by wetlands with cattails and willows as the dominant species. Only the 12' x 15' concrete slab and manhole showed evidence of disturbance. No other impacts to the wetlands were noted.

Unanticipated Impact Findings

During the field investigation, ESEI continued to examine the routing corridors and areas adjacent to construction sites for

evidence of unanticipated impacts. The unanticipated impact of dewatering wetlands or draining of wetlands as described in the EA and the EIS could not be supported based on the findings of the field investigation. The other unanticipated impact of equipment problems and associated risks was realized. The locations or types of structures used at proposed access shafts #6 and #7 were altered due to tunneling equipment problems. These alterations, however, did not result in any impact to wetlands and/or floodplains.

Recommendations and Conclusions

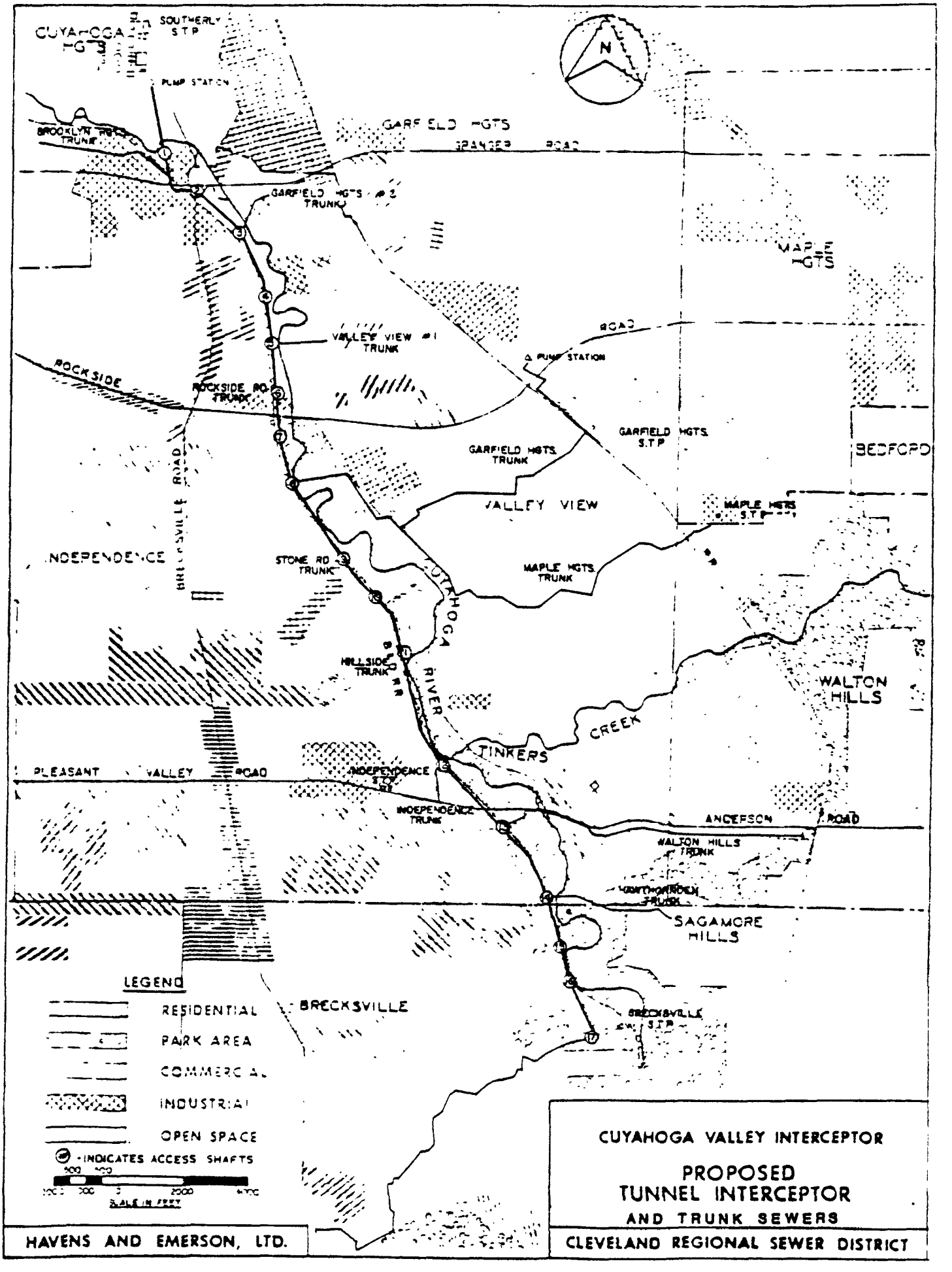
The most significant drawback to both the prediction of potential impacts and the evaluation of actual impacts to wetlands was the absence and/or lack of adequate verifiable pre-project baseline data (i.e., wetlands maps showing the extent, type, drainage patterns and boundary delineations of all wetlands within the project area at a sufficient level of detail as to allow for the identification and evaluation of the discrete wetlands or areas of wetlands whose impacts are described in the EA or EIS).

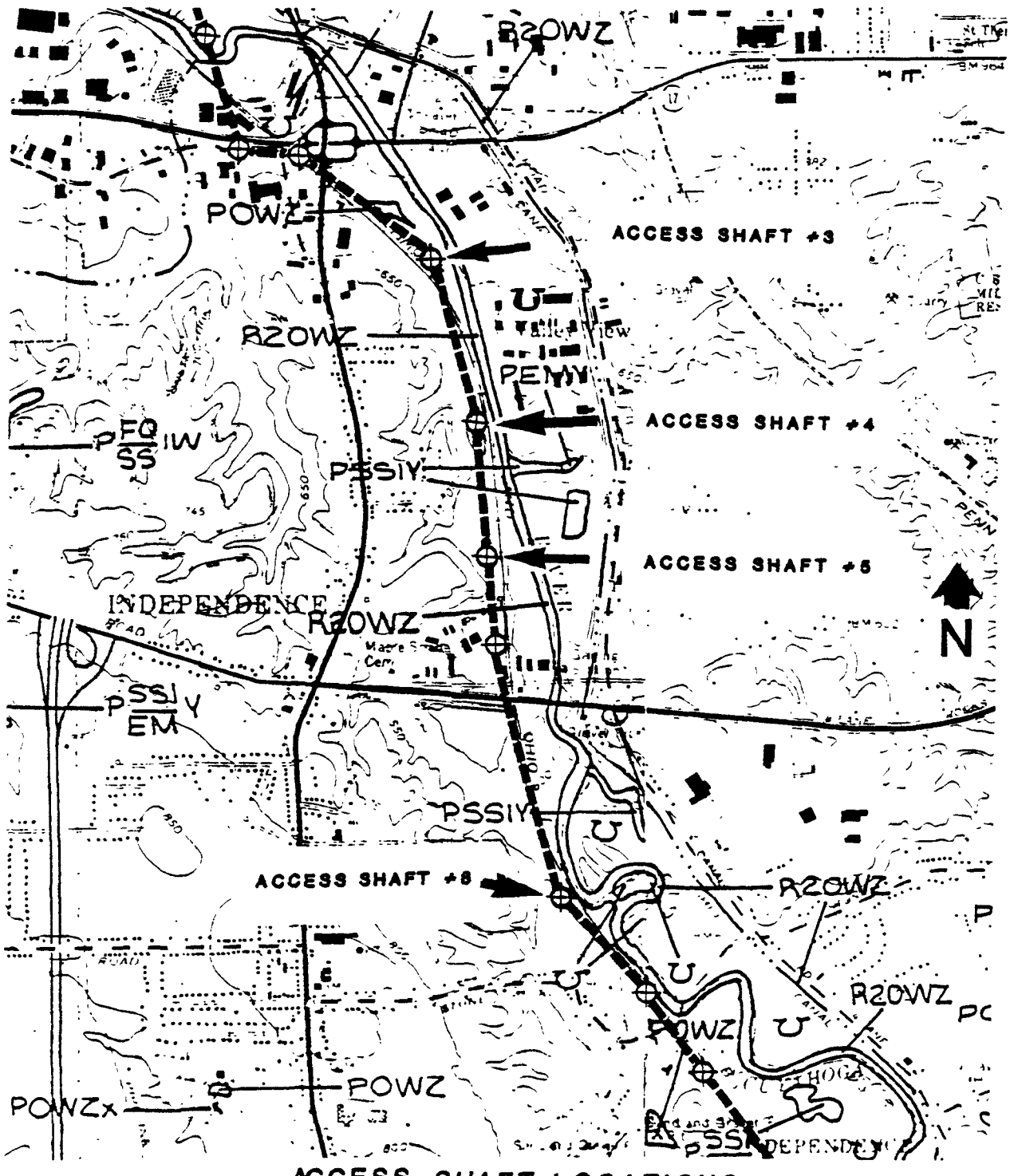
In a first attempt to identify and evaluate potential impacts to wetlands, ESEI reviewed maps of wetlands prepared under the USFWS National Wetlands Inventory Program to determine if the impacted wetlands described in the EA were delineated on the maps. The result of this review showed that only two of the potentially impacted wetland areas (near shafts #15 and #16) were delineated on the National Wetlands Inventory Maps. Because of the absence of an adequate data base, it was difficult to determine the extent and degree of the actual impacts to wetlands.

The impact to access shaft #3, for example, was described as follows: "A small portion of the wet area will require fill. The area at site #3 was changed to minimize damage to a wetland. A portion of the wetland will still be modified but the modification is minimized and consolidated at one edge of the wet area."

Since the baseline boundaries of the wetlands were not delineated, it was impossible to determine the extent of the filling which took place due to construction related activities. It

should be noted that no minimum size limits are used as criteria for mapping wetlands on the National Wetlands Inventory Maps, but the accuracy of the maps cannot be guaranteed without field verification and most of the Ohio maps that were used have no been field checked. Even with field checked maps, the scale of 1:24000 makes evaluations of small wetland (1-10 acres) areas extremely difficult and sometimes impossible. To overcome this problem it is recommended that future investigations use soil surveys and wetland maps developed at larger scale to evaluate wetland impacts.


CUYAHOGA HGTS
SOUTHERLY STP
PUMP STATION
BROOKLYN HGTS TRUNK
GARFIELD HGTS
GARFIELD HGTS #2 TRUNK
MAPLE HGTS
VALLEY VIEW #1 TRUNK
ROCKSIDE
ROCKSIDE RD TRUNK
PUMP STATION
GARFIELD HGTS. S.T.P
GARFIELD HGTS. TRUNK
BEDFORD
VALLEY VIEW
MAPLE HGTS S.T.P
INDEPENDENCE
STONE RD TRUNK
MAPLE HGTS. TRUNK
CUYAHOGA RIVER
HILLSIDE TRUNK
WALTON HILLS
TINKERS CREEK
PLEASANT VALLEY ROAD
INDEPENDENCE S.T.P
INDEPENDENCE TRUNK
ANDERSON ROAD
WALTON HILLS TRUNK
SAGAMORE HILLS
BRECKSVILLE
BRECKSVILLE S.T.P
LEGEND
RESIDENTIAL
PARK AREA
COMMERCIAL
INDUSTRIAL
OPEN SPACE
INDICATES ACCESS SHAFTS
SCALE IN FEET
CUYAHOGA VALLEY INTERCEPTOR
PROPOSED
TUNNEL INTERCEPTOR
AND TRUNK SEWERS
HAVENS AND EMERSON, LTD.
CLEVELAND REGIONAL SEWER DISTRICT



ACCESS SHAFT LOCATIONS

ON NATIONAL WETLANDS INVENTORY MAPS

SCALE 1:24000

1 ½ 0 1 MILE

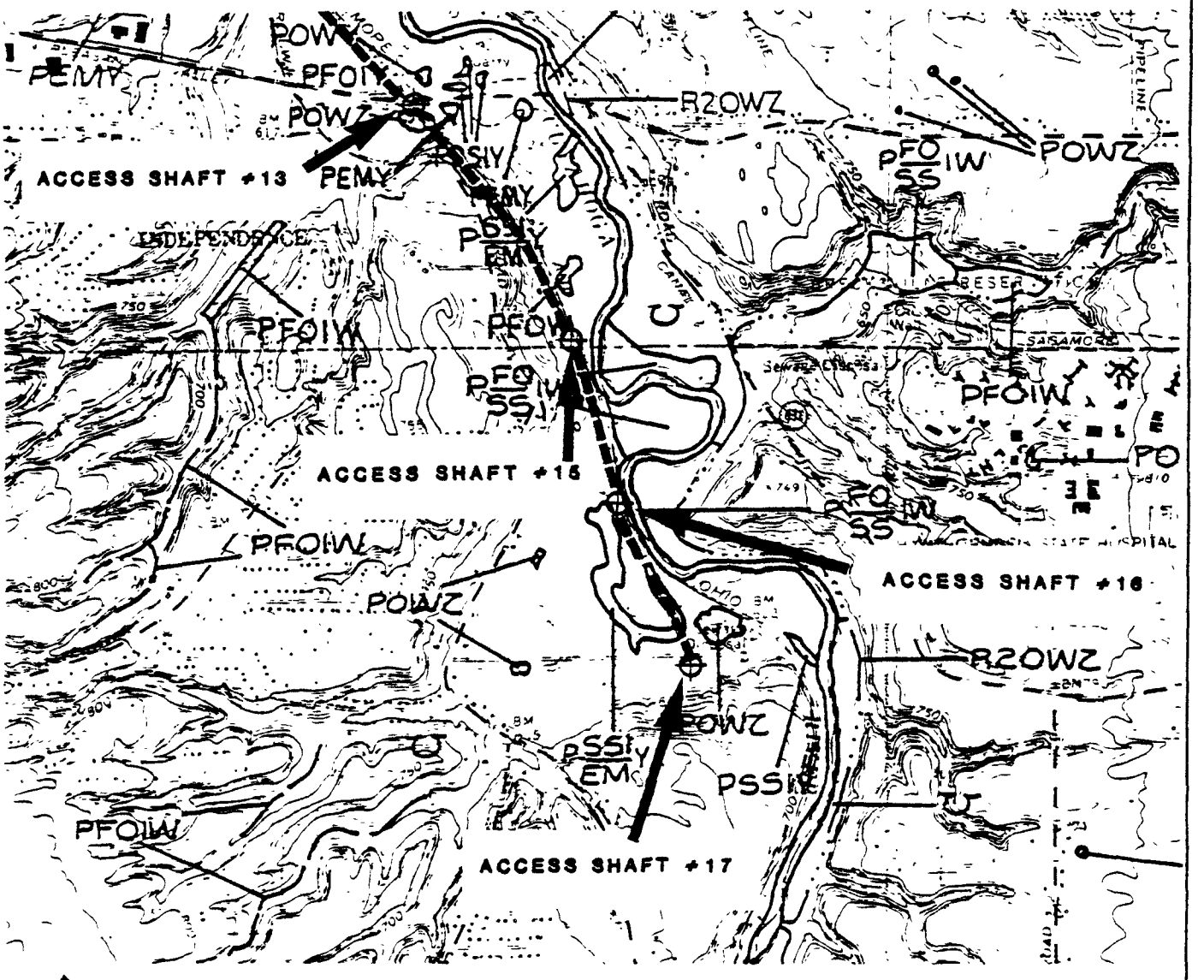
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CUYAHOGA VALLEY INTERCEPTOR

ACCESS SHAFT

ESEI
A Resources Management Company



ACCESS SHAFT LOCATIONS

ON NATIONAL WETLANDS INVENTORY MAPS

SCALE 1:24 000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

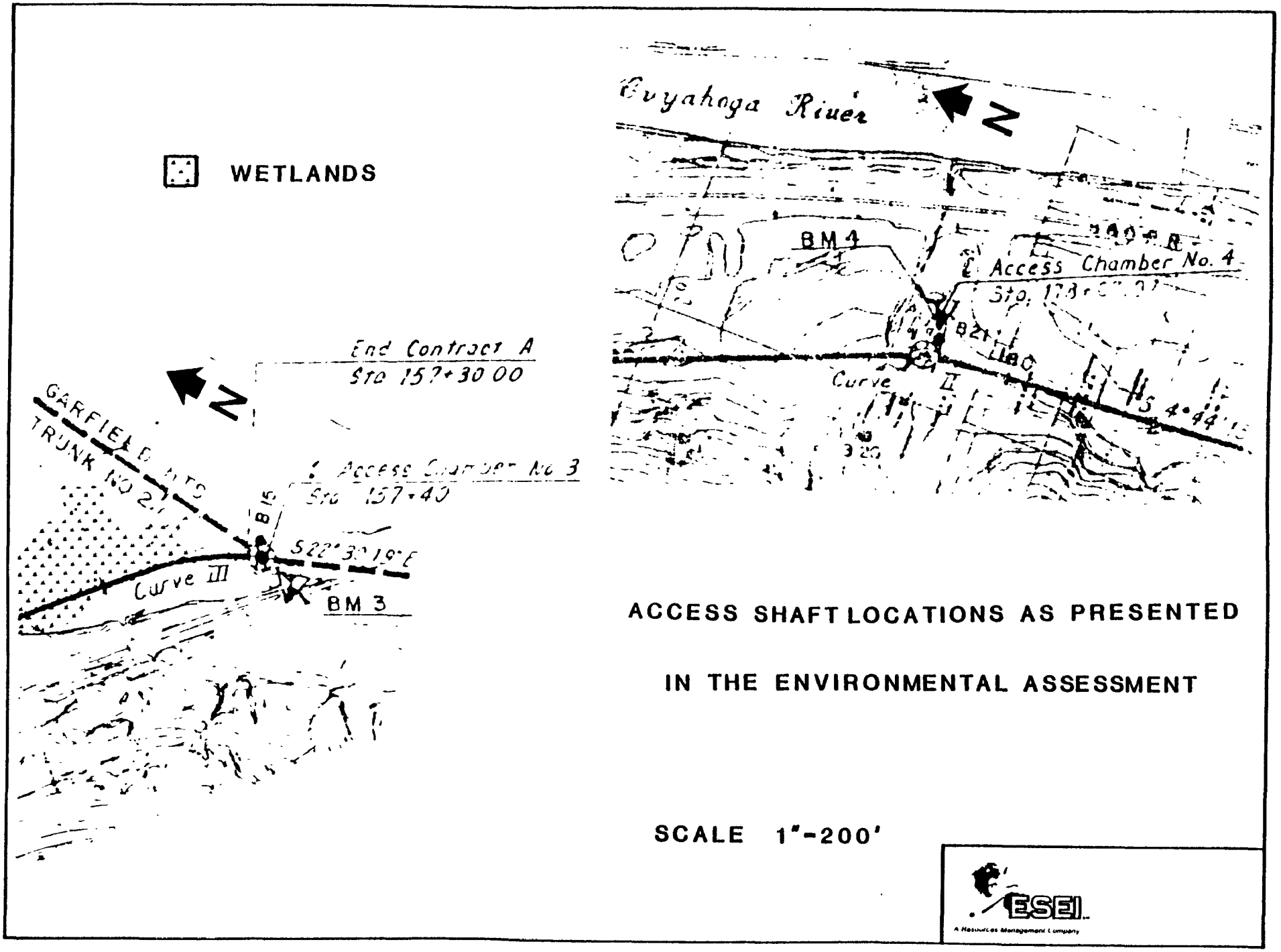
1 KILOMETER

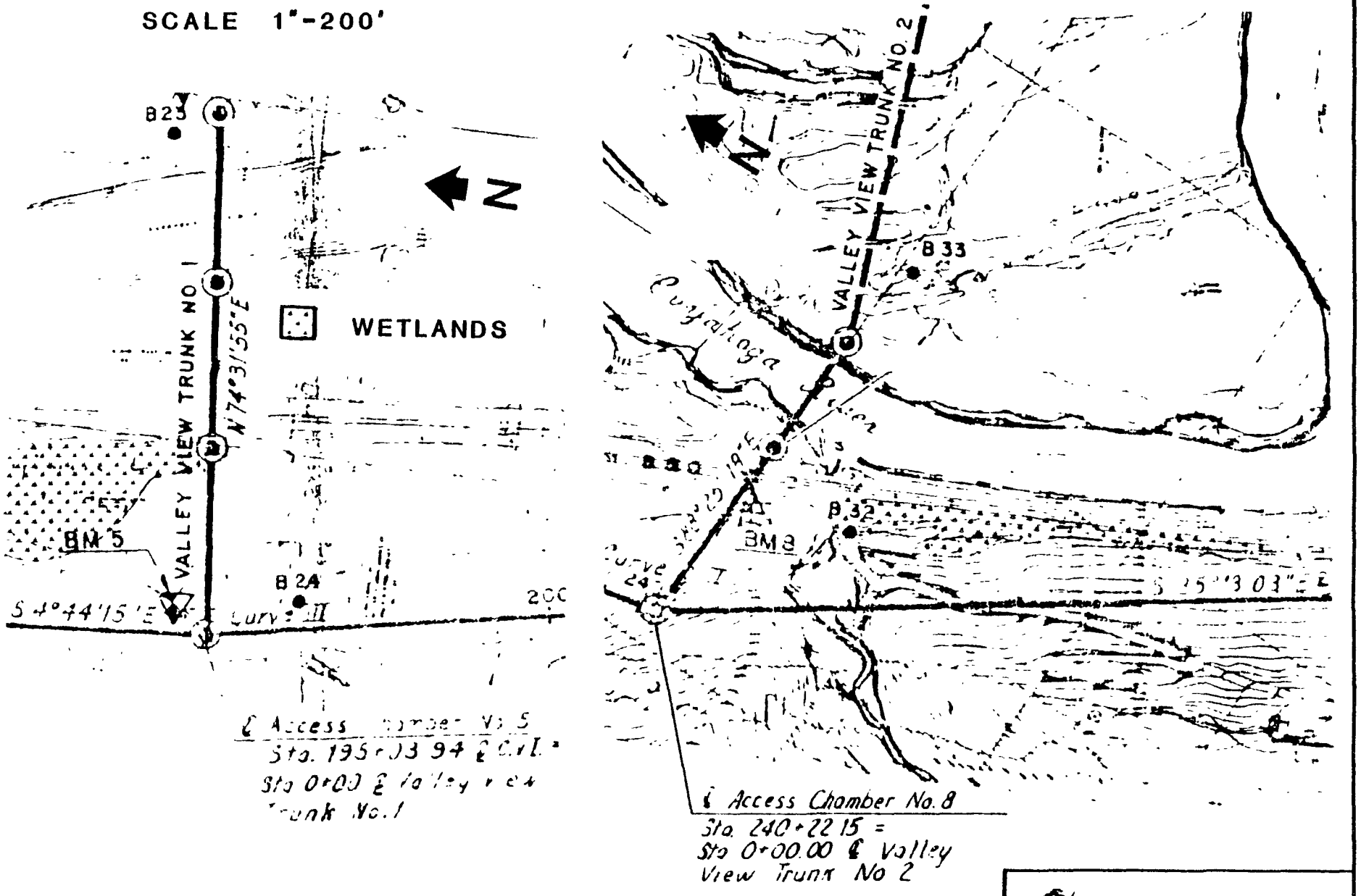
CUYAHOGA VALLEY INTERCEPTOR

ACCESS SHAFT

ESEI

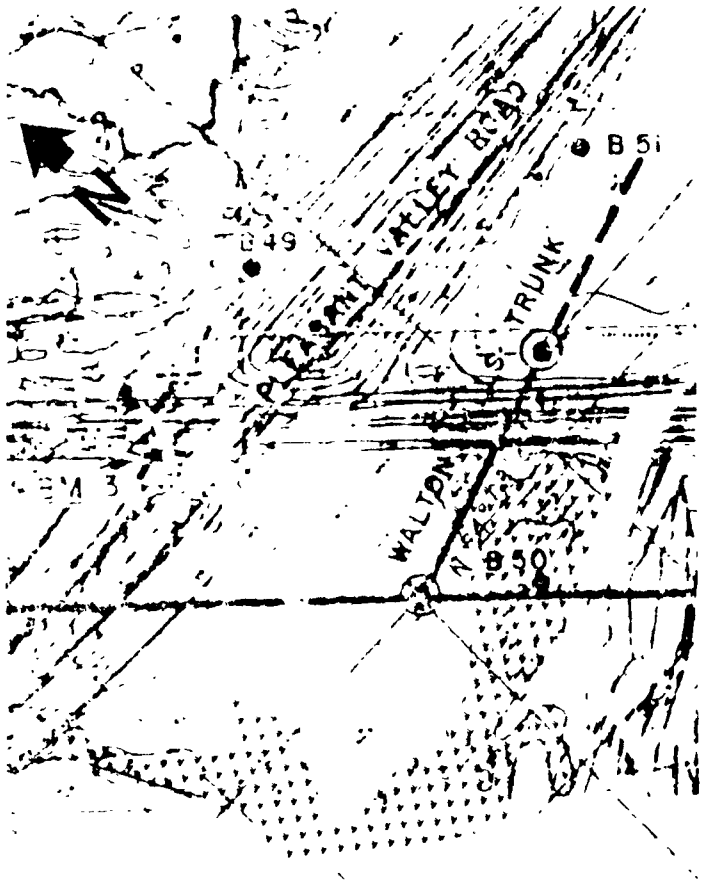
A Resources Management Company


WETLANDS
Cuyahoga River
N
BM 4
Access Chamber No. 4
Curve II
End Contract A
Sta 157+30.00
N
GARFIELD HTS
TRUNK NO 2
Access Chamber No 3
Sta 157+40
B 15
S 22° 30' 19" E
Curve III
BM 3
ACCESS SHAFT LOCATIONS AS PRESENTED
IN THE ENVIRONMENTAL ASSESSMENT
SCALE 1"=200'
ESEI
A Resources Management Company

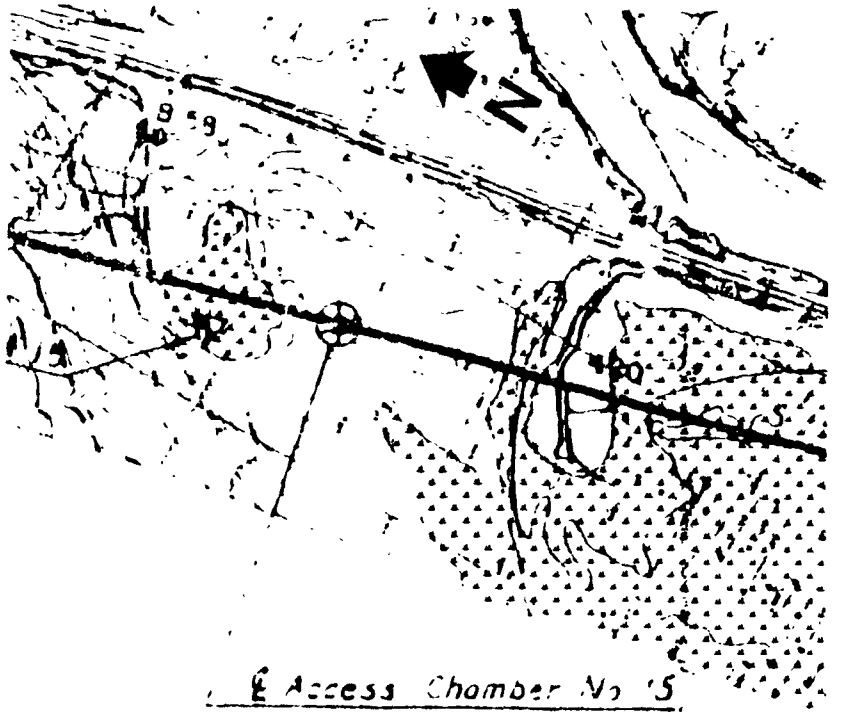


ACCESS SHAFT LOCATIONS AS PRESENTED IN THE ENVIRONMENTAL ASSESSMENT

ESEI
A Resource Management Company



Access Chamber No. 13



℄ Access Chamber No. 15
Sta. 417+00

ACCESS SHAFT LOCATIONS AS PRESENTED IN THE ENVIRONMENTAL ASSESSMENT

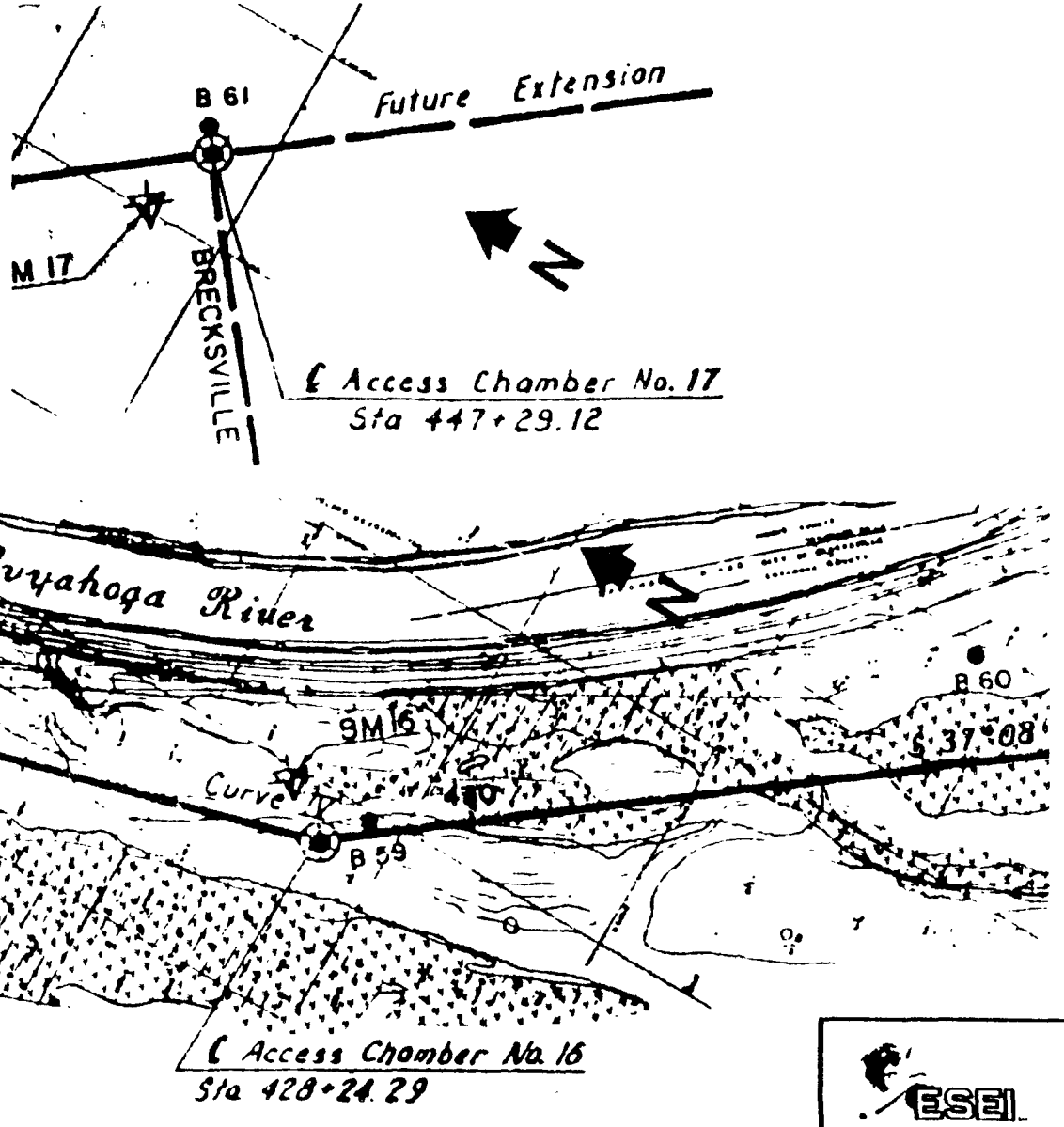
WETLANDS

SCALE 1"-200'

ESEI
A Resources Management Company

ACCESS SHAFT LOCATIONS AS PRESENTED IN THE ENVIRONMENTAL ASSESSMENT

WETLANDS



SCALE 1"-200'

ESEI
A Resources Management Company

APPENDIX A-7

EVALUATION FORMS

Evaluation Form

1. Project Name. SIGNE RIVER
2. Needs(Facility) No. [illegible] NPDES No.
   Grant No. [illegible]
3. Date of Document: Year 1977 Month 06 Day
4. Type of Document: a. EIS b. EA c. EID d. Facilities Plan ✓ e. Negative Dec. f. FNSI
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction:

41-12-30N--087-27-30W	41-10-00N--087-27-30W
41-12-30N--087-26-30W	41-10-00N--087-26-30W
--N-- -- -- W	--N-- -- -- W

6. Issue: FLOODPLAIN Parameter: SIZE
7. Type of Impact: 1 (1=Quantiative) (2=Qualitative)
8. Prediction:

TWO ACRE MINIMUM SITE REQUIREMENT FOR NWTA CONSTRUCTED IN FLOODPLAIN

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED
10. Baseline Conditions: Year 1977

INDEVELOPED FLOODPLAIN IN SOD FARM

11. Predicted for end of planning period: Year 1997

PROPOSED ACTION DOES NOT FORCE CHANGE ON LAND USE DERIVING BENEFITS FROM ADDITIONAL TWO ACRES

12. Predicted for current year: Year 1984

MINIMUM TWO ACRES SITE FOR WWTP FACILITIES

13. Actual current conditions:

WWTP WAS CONSTRUCTED IN LOCATION PREDICTED AND WAS OBSERVED TO COVER APPROXIMATELY TWO ACRES

14. Data Base: FIELD INVESTIGATION JULY 18 1984

15. Summary: (Code 11 **)**

CONSTRUCTION OF THE WWTP APPEARS TO CONFORM TO THE PREDICTED ACREAGE IN THE NEPA DOCUMENT IN THE 100 YEAR FLOODPLAIN

16. Regulations in Effect:

A. Baseline: PRM #510

Today: 40 CFR PART 6 40 CFR PART 35

B. Baseline: PRM 216-5

Today: 40 CFR 6.203 6.302 APPENDIX A

C. Baseline:

Today: 40 CFR 35.9117-11

17. Reviewer: [illegible] **18. Date of Review: Year** [illegible] **Month** [illegible] **Day** [illegible]

19. Title of Narrative Report: FIELD INVESTIGATION SCHNEIDER INC

20. Location of Narrative Report:

DRAFT

Evaluation Form

1. Project Name. SCHNEIDER INDIANA

2. Needs(Facility) No. 48011470 NPDES No. ____

Grant No. 48047402

3. Date of Document: Year 1977 Month 06 Day ____

4. Type of Document: a. EIS ____ b. EA ____ c. EID ____ d. Facilities Plan X e. Negative Dec. ____ f. FNSI ____

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: ____

41-12-30N--87-27-30W 41-10-00N--87-27-30W

41-12-30N--87-26-30W 41-10-00N--87-26-30W

--N-- -- W --N-- -- W

6. Issue: FLOODPLAIN Parameter: SOIL LOSS FROM FLOODPLAIN

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

EMBANKMENT AROUND PLANT COULD TO MINIMIZE EROSION

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1977

EXTREMELY FLAT TOPOGRAPHY IN FLOODPLAIN AND ADJACENT TO BROWN DITCH - MINIMAL SOIL LOSS MINIMIZED BY TOPOGRAPHY

11. Predicted for end of planning period: Year 1977

PROJECT BUILT ON FIVE TO EIGHT FOOT HIGH EMBANKMENT - SOIL LOSS FROM THE EMBANKMENT IN FLOODPLAIN MINIMIZED BY THE EMBANKMENT

12. Predicted for current year: Year 1984

EMBANKMENT SODDED - EROSION MINIMIZED

13. Actual current conditions:

THE EMBANKMENT UPON WHICH THE WTP SITS HAS BEEN SODDED. NO EVIDENCE OF EROSION OBSERVED

14. Data Base: FIELD INVESTIGATION JULY 18 1984

15. Summary: (Code -)

THE OBSERVATIONS OF SODDING AND NO NOTICABLE EROSION CONFORM TO THE PREDICTION IN THE NEPA DOCUMENT

16. Regulations in Effect:

A. Baseline: PGM #50

Today: 40 CFR PART 61 40 CFR PART 35

B. Baseline: PRM 76-5

Today: 40 CFR 60.403 60.302 APPENDIX A

C. Baseline:

Today: 40 CFR 35.917-1

17. Reviewer: MHP **18. Date of Review: Year** 1984 **Month** 08 **Day** 15

19. Title of Narrative Report: FIELD INVRPT SCHNEIDER

20. Location of Narrative Report:

Evaluation Form

1. Project Name. SANDY CREEK INDIANA

2. Needs(Facility) No. 1 8 0 1 7 5 0 1 NPDES No. _____

Grant No. 6 3 - 4 4 0 2 2

3. Date of Document: Year 1 9 7 7 Month 0 6 Day _____

4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ✓ e. Negative Dec. ___ f. FNSI ___

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: _____

41-12-30N--087-27-30W 41-10-00N--087-27-30W

41-12-30N--087-26-30W 41-10-00N--087-26-30W

--N--W --N--W

6. Issue: FLOODPLAIN Parameter: DRAINAGE PATTERNS

7. Type of Impact: 2 (1 = Quantiative) (2 = Qualitative)

8. Prediction:

LOCALIZED CHANGES IN DRAINAGE PATTERN AROUND THE WETTER SITE IN THE FLOODPLAIN

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1977

MAY HAVE BEEN RELATIVELY LESS RUNOFF AND MORE INFILTRATION OF RAINFALL DUE TO EXTREMELY FLAT TOPOGRAPHY. GENERAL DIRECTION OF RUNOFF WAS NORTH TO BROWN DITCH

11. Predicted for end of planning period: Year 1997

LOCALIZED CHANGES IN SURFACE DRAINAGE PATTERNS DUE TO WATER CONSTRUCTED ON SITE FOR HIGH EMBANKMENT IN FLOODPLAIN

12. Predicted for current year: Year 1984

SAME AS FOR END OF PLANNING PERIOD

13. Actual current conditions:

SOME LOCALIZED CHANGE HAS OCCURRED BECAUSE OF THE MOUNDED WASTE. NO PONDING OF WATER WAS OBSERVED FOLLOWING A DAY OF RAIN. THEREFORE INFILTRATION IS STILL OCCURRING

14. Data Base: FIELD INVESTIGATION JULY 18 1984

15. Summary: (Code -1 **)**

LOCALIZED CHANGES IN SURFACE DRAINAGE PATTERNS ARE NOT ADVERSE NOR SIGNIFICANT AND THEREFORE REGRESS WITH THE INTENT OF THE INTERPRETED IMPACT

16. Regulations in Effect:

A. Baseline: PGM #510

Today: 40 CFR PART 61 40 CFR PART 135

B. Baseline: PRM 76-5

Today: 40 CFR 61.2013 61.3012 APPENDIX A

C. Baseline:

Today: 40 CFR 35.917-1

17. Reviewer: MLP **18. Date of Review: Year** 1984 **Month** 07 **Day** 18

19. Title of Narrative Report: FIELD INVIRPT SCHNEIDER IN

20. Location of Narrative Report:

Evaluation Form

1. Project Name. BIG ONE DEL NORTE

2. Needs(Facility) No. 1 8 0 1 1 0 0 1 NPDES No.

Grant No. 1 8 0 4 4 4 0 0 2

3. Date of Document: Year 1 9 7 7 Month 0 6 Day

4. Type of Document: a. EIS b. EA c. EID d. Facilities Plan ✓ e. Negative Dec. f. FNSI

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction:

41-12-30N--87-27-30W 41-10-40N--87-27-30W

41-12-30N--87-26-30W 41-10-40N--87-26-30W

N--W N--W

6. Issue: FLOODPLAIN Parameter: CHANGE IN FLOOD STORAGE CAPACITY

7. Type of Impact: 1 (1=Quantiative) (2=Qualitative)

8. Prediction:

CHANGES IN FLOOD STORAGE CAPACITY WITH BUILDING MODELED AREA FOR INPUT SITE 1 2 ACRES STEBTWEEN S-8 FEET. WITH CHOSE CHANGE IN FLOODPLAIN BOUNDARY

9. Source of NEPA Document Data: IDAR RECOMMENDATION

10. Baseline Conditions: Year 1 9 7 7

TWO ACRE SITE HAD NO ~~FLOODPLAIN~~ DEVELOPMENT OR. BTRUCTURE TO REDIRECT FLOODWATER. CORPORATE IS EXTREMELY FLAT AND LOW WEAR FLOODPLAIN FOR KANKAKEE RIVER AND MEGAPOLIS TRIBUTARY DITCHES ARE ENTENDED VERY LONG OVERALL EACH OTHER

11. Predicted for end of planning period: Year 1 9 9 7

CHANGE IN FLOOD STORAGE CAPACITY FROM CONSTRUCTION IN FLOODPLAIN WITH CHOSE EXPANSION OF FLOODPLAIN BOUNDARY

12. Predicted for current year: Year 1984

SAME PREDICTION AS END OF PLANNING PERIOD

13. Actual current conditions:

CONSTRUCTION OF MOUND WAS OBSERVED TO COVER LESS THAN TWO ACRES AND A HEIGHT BETWEEN EIGHT TO TEN FEET.

14. Data Base: FIELD INVESTIGATION JULY 18, 1984

15. Summary: (Code ±11)

REVIEWERS DECIDED BORROW MATERIAL FOR MOUND CAME FROM ANOTHER PART OF PLOODPLAIN, INDICATING NO OVERALL CHANGE IN FLOODSTORAGE CAPACITY. WHILE LOCALIZED CHANGES HAVE OCCURRED IMPACT IS INSIGNIFICANT BECAUSE ENTIRE AREA IS CONSIDERED PART OF 100 YEAR FLOODPLAIN

16. Regulations in Effect:

A. Baseline: PGM #510

Today: HO CFR PART 60 HO CFR PART 351

B. Baseline: PRM 76-5

Today: HO CFR 60.3(b) 60.3(d) APPENDIX A

C. Baseline:

Today: HO CFR 351.9(7-11)

17. Reviewer: MLP **18. Date of Review: Year** 1984 **Month** 07 **Day** 18

19. Title of Narrative Report: FIELD INV RPT SCHNEIDER IN

20. Location of Narrative Report:

Evaluation Form

1. Project Name. ER-COMS/

2. Needs(Facility) No. 55-01-01 NPDES No.

Grant No. 55-0815-0130

3. Date of Document: Year 1976 Month 11 Day 15

4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☑ e. Negative Dec. ☐ f. FNSI ☐

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction:

44-09-30N--088-05-00W 44-09-30N--088-03-30W

44-11-00N--088-03-30W 44-11-00N--088-00-00W

--N-- --W --N-- --W

6. Issue: WETLANDS Parameter: BOUNDARY ENCROACHMENT

7. Type of Impact: 1 (1 = Quantiative) (2 = Qualitative)

8. Prediction:

WWTP WOULD OCCUPY APPROXIMATELY FIVE ACRES ADJACENT TO PROPOSED BRILLION MARSH WILDLIFE AREA.

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1970

UNDEVELOPED LAND IN AGRICULTURAL USE ADJACENT TO MARSH AND FLOODPLAIN OF BLACK CREEK. TOPOGRAPHY HIGHER THAN ADJACENT WETLAND AND FLOODPLAIN

11. Predicted for end of planning period: Year 1990

SITE OF WWTP

12. Predicted for current year: Year 1984

SITE OF BRILLION WWTP

13. Actual current conditions:

SITE OF BRILLION WWTP. THERE WAS NO OBSERVED ENCROACHMENT OF MARSH/FLOOD PLAIN BY CONSTRUCTION OF WWTP SITE OR ITS OPERATIONS

14. Data Base: FIELD INVESTIGATION JULY 24 1984

15. Summary: (Code -11)

FROM OBSERVATION THE WWTP SITE APPEARED TO BE FIVE ACRES AND IN THE LOCATION DESCRIBED IN THE MEPA DOCUMENT RELATIVE TO THE BRILLION STATE GOLF AREA

16. Regulations in Effect:

A. Baseline: PGM #501

Today: 40 CFR PART 6 40 CFR PART 35

B. Baseline: EPA WETLAND POLICY 38 FR 10534

Today: 40 CFR 6.203 6.302 APPENDIX A

C. Baseline:

Today: 40 CFR 35.917-1

17. Reviewer: MLP 18. Date of Review: Year 1984 Month 07 Day 24

19. Title of Narrative Report: FIELD INV RPT BRILLION WTS

20. Location of Narrative Report:

DRAFT

Evaluation Form

1. Project Name. FRILLION WISCONSIN
2. Needs(Facility) No. 550 0 8 0 0 1 NPDES No. _____
   Grant No. 5 5 0 3 7 5 0 2 0
3. Date of Document: Year 1 9 7 6 Month 11 Day 15
4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☑ e. Negative Dec. ☐ f. FNSI ☐
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: _____

   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
6. Issue: FLOODPLAIN Parameter: DRAINAGE PATTERNS
7. Type of Impact: 2 (1 = Quantiative) (2 = Qualitative)
8. Prediction:

   INTERCEPTORS WILL BE CONSTRUCTED IN FLOODPLAIN AREAS. THIS IMPACT IS MINIMAL

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED
10. Baseline Conditions: Year 1976

    UNDEVELOPED UNDISTURBED LAND ON EITHER SIDE OF BLACK CREEK CATTAILS DOMINANT

11. Predicted for end of planning period: Year 1976

    INTERCEPTOR CONSTRUCTED IN BLACK CREEK FLOODPLAIN. NO LONG TERM ADVERSE IMPACT

12. Predicted for current year: Year 1984

INTERCEPTOR CONSTRUCTED - MINIMAL IMPACT TO FLOODPLAIN

13. Actual current conditions:

DRAINAGE PATTERNS AND TOPOGRAPHY DID NOT APPEAR DISTURBED IN THE AREA OF INTERCEPTOR ALIGNMENT

14. Data Base: FIELD INVESTIGATION JULY 24 1984

15. Summary: (Code -)

NO LONG TERM ADVERSE IMPACTS WERE OBSERVED IN THE AREA OF INTERCEPTOR STREAM AND FLOODPLAIN CROSSINGS

16. Regulations in Effect:

A. Baseline: PGDI #50

Today: 40 CFR PART 6 40 CFR PART 35

B. Baseline: EAA WETLANDS POLICY 38 FR 10834

Today: 40 CFR 6.203 6.302 APPENDIX A

C. Baseline:

Today: 40 CFR 35.9117-1

17. Reviewer: MLP **18. Date of Review: Year** 1984 **Month** 07 **Day** 24

19. Title of Narrative Report:

20. Location of Narrative Report:

Evaluation Form

1. Project Name. MENASHA WISCONSIN

2. Needs(Facility) No. 55200001 NPDES No. _____

   Grant No. 5173750-26

3. Date of Document: Year 1980 Month 03 Day 11

4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☑ e. Negative Dec. ☑ f. FNSI ☐

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: _____

   44-15-00N--88-20-00W 44-13-00N--88-20-00W

   44-15-00N--88-47-00W 44-13-00N--88-27-00W

   --N-- --W --N-- --W

6. Issue: WETLAND Parameter: BOUNDARY ENCROACHMENT

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

   DURING INTERCEPTOR CONSTRUCTION PROPER DRAINAGE WILL BE MAINTAINED AND SITE GRADING IN ROAD RIGHT OF WAY WILL MINIMIZE WETLAND ENCROACHMENT

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1980

    AREA OF SEWER ALIGNMENT WAS, IN PART, IN A PREVIOUSLY DISTURBED ROAD RIGHT OF WAY AND IN PART ALONGSIDE A RAILROAD RIGHT OF WAY WHICH CAN ALSO BE CONSIDERED A DISTURBED ENVIRONMENT

11. Predicted for end of planning period: Year 2000

    ALONG TERM ADVERSE IMPACT FROM MODIFICATION OF DRAINAGE TO ADJACENT WETLAREAS ALONG LENGTH OF INTERCEPTOR

12. Predicted for current year: Year 1984

SAME AS FOR END OF PLANNING PERIOD

13. Actual current conditions:

COULD NOT EVALUATE IMPACTS THAT OCCURRED DURING CONSTRUCTION. MAJOR PART OF SUBDIVISION IN INTERCEPTOR DID NOT APPEAR TO HAVE ANY LONG TERM ADVERSE IMPACTS TO ADJACENT WETAREA NOR WAS INTERCEPTOR BUILT WITHIN ANY WETAREAS

14. Data Base: FIELD INVESTIGATION JULY 24 1984

15. Summary: (Code 10 **)**

DIRECTED IMPACT ADDRESSED DRAINAGE DURING ACTUAL CONSTRUCTION ACTIVITY THEREFORE COULD NOT BE EVALUATED. NO LONG TERM ADVERSE DRAINAGE IMPACT WERE OBSERVED

16. Regulations in Effect:

A.Baseline: 40 CFR PART 6 40 CFR PART 35

Today: SAME

B.Baseline: 40 CFR 6.203 6.302 APPENDIX 5

Today: SAME

C.Baseline: 40 CFR 351.9117-11

Today: SAME

17. Reviewer: MLP **18. Date of Review: Year** 1984 **Month** 07 **Day** 24

19. Title of Narrative Report: FIELD INVIRPT MENASHA WIS

20. Location of Narrative Report:

Evaluation Form

1. **Project Name.** MENASHA WISCONSIN

2. **Needs(Facility) No.** 550340201 **NPDES No.** _____

   Grant No. 551275N020

3. **Date of Document: Year** 1980 **Month** 03 **Day** 17

4. **Type of Document: a. EIS** ___ **b. EA** ___ **c. EID** ___ **d. Facilities Plan** ✓ **e. Negative Dec.** ✓ **f. FNSI** ___

5. **Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction:** _____

   44-15-00N--088-23-00W 44-13-00N--088-22-00W

   44-15-00N--088-23-00W 44-13-00N--088-22-00W

   ___-___-___N--___-___-___W ___-___-___N--___-___-___W

6. **Issue:** WETLAND **Parameter:** SOIL LOSS FROM FLOODPLAIN

7. **Type of Impact:** 2 **(1 = Quantiative) (2 = Qualitative)**

8. **Prediction:**

   EROSION OF SITE WILL BE REPTIO A MINIMUM DURING CONSTRUCTION AND WILL BE PREVENTED AFTERWARD BY MAINTAINING GRASS COVER ON ALL EXPOSED SLOPES ON THE SITE

9. **Source of NEPA Document Data:** SOURCE NOT DOCUMENTED

10. **Baseline Conditions: Year** 1980

    AREA TO BE FILLED SLOPED FROM GRADE THE SAME LEVEL AS ROAD DOWN TO LAKE LEVEL. PORTION OF SITE WAS SEASONALLY FLOODED TYPE 7 WETLAND (WOODED SWAMP) AND PORTION WAS SEASONALLY FLOODED TYPE 2 WETLAND (LOWLAND FRESH MEADOW)

11. **Predicted for end of planning period: Year** 2000

    LITTLE OR NO SOIL LOSS (EROSION) FROM WATER SITE BECOMES FILLED IN WETLAND. GRASS COVER ON ALL EXPOSED SLOPES

12. Predicted for current year: Year 1984

SAME AS END OF PLANNING PERIOD

13. Actual current conditions:

GRASS COVER (SOD) WAS OBSERVED ON ALL EXPOSED SLOPES AROUND FILLED IN AREA. NO EVIDENCE OF EROSION WAS NOTED ON THESE SLOPES OR AT THE BASE OF THE EMBANKMENT WHICH IS THE FLOOD PLAIN/WETLAND

14. Data Base: FIELD INVESTIGATION JULY 24 1984

15. Summary: (Code -1)

EROSION THAT OCCURRED DURING CONSTRUCTION COULD NOT BE EVALUATED

THE LONG TERM PREDICTION APPEARED ACCURATE FROM OBSERVATIONS MADE DURING FIELD VISIT

16. Regulations in Effect:

A. Baseline: 40 CFR PART 6 | 40 CFR PART 35T

Today: SAME

B. Baseline: 40 CFR 6.1203 | 6.3012 APPENDIX A

Today: SAME

C. Baseline: 40 CFR 35.9117-11

Today: SAME

17. Reviewer: MLP **18. Date of Review:** Year 1984 **Month** 07 **Day** 24

19. Title of Narrative Report: FIELD INVRPT MENASHA WIS

20. Location of Narrative Report:

Evaluation Form

1. **Project Name.** MENASHA ALTERNATIVES

2. **Needs(Facility) No.** E5[illegible] **NPDES No.** _____

   Grant No. E5[illegible]SN0210

3. **Date of Document: Year** 1980 **Month** 03 **Day** [illegible]

4. **Type of Document: a. EIS** ___ **b. EA** ___ **c. EID** ___ **d. Facilities Plan** ___ **e. Negative Dec.** ✓ **f. FNSI** ___

5. **Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction:** _____

   44-15-00N--088-28-00W 44-13-00N--088-28-00W

   44-15-00N--088-27-00W 44-13-00N--088-27-00W

   --N-- -- -- -- W --N-- -- -- -- W

6. **Issue:** WETLAND **Parameter:** DRAINAGE PATTERNS

7. **Type of Impact:** 2 **(1=Quantiative) (2=Qualitative)**

8. **Prediction:**

   PROJECT WILL INVOLVE MODIFICATION OF IMMEDIATE LANDSCAPE BUT WILL NOT AFFECT NATURAL DRAINAGE OF AREA

9. **Source of NEPA Document Data:** SOURCE NOT DOCUMENTED

10. **Baseline Conditions: Year** 1980

    PRESENTLY AREA WAS DISTURBED WETLAND WOODED SWAMP AND FRESH MEADOW AND NATURAL SURFACE DRAINAGE WAS FROM WEST OF NORTH ROAD TOWARDS EAST ACROSS THE WETLAND AND DIRECT OVER THE LANDSCAPE SMOTHES DESMORTS SAME AS FOX RIVER

11. **Predicted for end of planning period: Year** 2000

    NATURAL SURFACE DRAINAGE WILL BE SAME THAT DESCRIBED IN BASELINE CONDITIONS

12. Predicted for current year: Year 1984

SAME AS END OF PLANNING PERIOD

13. Actual current conditions:

WWTP BUILT ON MOUND

APPROXIMATELY 8 FT HIGH AND MERGES WITH GRADE OF ROADWAY AND OLD WWTP SITE. RUNOFF FROM WWTP SITE FLOWS DOWN EMBANKMENT SLOPE TO THE NORTH THEN EAST TO LAKE. MOST OF RUNOFF COMES OFF EAST SLOPE OF SITE AND ACROSS REMAINING WETLAND TO

14. Data Base: FIELD INVESTIGATION JULY 24 1984

15. Summary: (Code I **)**

NO MAJOR CHANGES IN NATURAL SURFACE DRAINAGE PATTERN AS PREDICTED IN NEPA DOCUMENT

16. Regulations in Effect:

A. Baseline: 40 CFR PART 6 40 CFR PART 35

Today: SAME

B. Baseline: 40 CFR 6.203 6.302 APPENDIX A

Today: SAME

C. Baseline: 40 CFR 35.9017

Today: SAME

17. Reviewer: MLP **18. Date of Review: Year** 1984 **Month** 07 **Day** 24

19. Title of Narrative Report: FIELD INVR PT MENASHA WIS

20. Location of Narrative Report:

Evaluation Form

1. Project Name. MENASHA ALGONQUIN

2. Needs(Facility) No. 55-3-70-1 NPDES No. ____

Grant No. 55-2750-02

3. Date of Document: Year 1980 Month 03 Day 11

4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. ___ f. FNSI ___

5 Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: ____

44-15-00 N--88-28-00 W	44-13-00 N--88-20-00 W
44-15-00 N--88-26-00 W	44-13-00 N--88-27-00 W
--- N--- W	--- N--- W

6.Issue: FLOODPLAIN Parameter: LANDS IN FLOOD STORAGE CAPACITY

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

LOSS OF THIS FLOODPLAIN-WETLAND AREA WILL NOT MEASURABLY AFFECT FLOOD ELEVATION OF LITTLE LAKE BUTTE DES MORTS

9. Source of NEPA Document Data: EPA PROJECT SUMMARY

10. Baseline Conditions: Year 1980.

MAJOR FUNCTION OF WETLAND AREA TO BE FILLED WAS FLOOD STORAGE WITHIN FLOODPLAIN OF 1320 ACRE LITTLE LAKE BUTTE DES MORTS. AREA WAS UNDISTURBED WOODED SWAMP AND INLAND FRESH MEADOW

11. Predicted for end of planning period: Year 2000

NO MEASURABLE EFFECT ON FLOOD ELEVATION OF LITTLE LAKE BUTTE DES MORTS

12. Predicted for current year: Year 1984

SAME AS END OF PLANNING PERIOD

13. Actual current conditions:

FLOOD STORAGE CAPACITY OVER AN AREA OF 11.6-12.0 ACRES AND A DEPTH RANGING FROM 0-18 FT HAS BEEN LOST TO 1300 ACRE FEET. 210 FT STRIP OF UNDISTURBED WOODED WETLAND STILL EXISTS BETWEEN WITO AND LAKE AND PROVIDES SOME FLOOD STORAGE CAPACITY

14. Data Base: FIELD INVESTIGATION JULY 24 1984

15. Summary: (Code 01 **)**

COULD NOT EVALUATE ACCURACY OF PREDICTION BECAUSE OF LACK OF FLOOD DATA. ADDITIONAL EFFORT WOULD HAVE BEEN REQUIRED TO QUANTIFY AND VERIFY THE OBSERVED IMPACT

16. Regulations in Effect:

A. Baseline: 40 CFR PART 6 | 40 CFR PART 35

Today: SAME

B. Baseline: 40 CFR 6.2013 | 6.3012 APPENDIX A

Today: SAME

C. Baseline: 40 CFR 35.9117-4

Today: SAME

17. Reviewer: MLP **18. Date of Review: Year** 1984 **Month** 07 **Day** 24

19. Title of Narrative Report: FIELD INVESTIGATION MENASHA WIS

20. Location of Narrative Report:

Evaluation Form

1. Project Name. MCASA WISCONSIN

2. Needs(Facility) No. 557346001 NPDES No. _____

Grant No. 551275N020

3. Date of Document: Year 1980 Month 03 Day 14

4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. X f. FNSI ___

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: _____

44-15-00N--088-28-00W 44-13-00N--088-28-00W

44-15-00N--088-27-00W 44-13-00N--088-27-00W

__-__-__N--__-__-__W __-__-__N--__-__-__W

6. Issue: WETLANDS Parameter: SIZE

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

CONSTRUCTION ACTIVITIES WILL BE LIMITED AS NEARLY AS POSSIBLE TO PHYSICAL BOUNDARIES OF THE PROPOSED PROJECT

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1980

AREA TO BE FILLED COVERED 1.1-2.0 SCOPE OF ROADED SLAND AND INLAND FRESH MEADOW THAT WAS FOUND STORED AND LOCATED ADJACENT TO OLD WATER

11. Predicted for end of planning period: Year 2000

NO EVIDENCE OF SUBTERRANEAN ENVIRONMENT SURROUNDING WETLAND SITE

12. Predicted for current year: Year 1984

SAME AS END OF PLANNING PERIOD

13. Actual current conditions:

THE AREA FILLED TO ACCOMODATE WWTP APPEARED TO BE WITHIN 20% OF ORIGINAL ACREAGE ESTIMATE. NO LONG TERM DISTURBANCE OF SURROUNDING VEGETATION IN THE ADJACENT WETLAND/FLOODPLAIN WAS NOTED

14. Data Base: FIELD INVESTIGATION JULY 24 1984

15. Summary: (Code -11)

OBSERVED IMPACTS APPEAR TO HAVE BEEN ACCURATELY PREDICTED

16. Regulations in Effect:

A. Baseline: 40 CFR PART 6 40 CFR PART 31

Today: SAME

B. Baseline: 40 CFR 6.203 6.302 APPENDIX A

Today: SAME

C. Baseline: 40 CFR 351.9117-1

Today: SAME

17. Reviewer: MLP **18. Date of Review: Year** 1984 **Month** 07 **Day** 24

19. Title of Narrative Report: FIELD INV RPT MENASHA WIS

20. Location of Narrative Report:

Evaluation Form

1. Project Name. MESAHA CONSTR

2. Needs(Facility) No. 55/3-070/ NPDES No. ____

Grant No. 55/275N020

3. Date of Document: Year 1980 Month 03 Day 14

4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ✓ e. Negative Dec. ___ f. FNSI ___

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: ____

__-__-__N--__-__-__W 44-13-07N--88-28-07W

44-15-07N--88-28-07W 44-13-07N--88-27-07W

44-15-07N--88-47-06W __-__-__N--__-__-__W

6. Issue: WETLAND Parameter: SIZE

7. Type of Impact: 1 (1=Quantiative) (2=Qualitative)

8. Prediction:

LOSS OF 1.6 ACRES OF TYPE 7 AND SOME TYPE 2 WETLAND MAY FALL WITHIN CONSTRUCTION

9. Source of NEPA Document Data: EPA PROJECT SUMMARY

10. Baseline Conditions: Year 1980

WETLAND TO BE FILLED WAS SEASONALLY FLOODED TYPE 7 WETLAND (WOODED SWAMP) AND A PORTION DIRECTLY NORTH OF EXISTING WTP WAS A SEASONALLY FLOODED TYPE 2 WETLAND (INLAND FRESH MEADOW)

11. Predicted for end of planning period: Year 2000

WETLAND ACREAGE OF 1.6-2.0 ACRES WILLED TO ACCOMMODATE EXPANSION OF EXISTING WTP TO REGIONAL WTP

12. Predicted for current year: Year 1984

SAME AS END OF PLANNING PERIOD

13. Actual current conditions:

BY OBSERVATION THE COMBINED AREA OF WOODED WETLAND/FRESH MEADOW THAT WAS FILLED APPEARED TO BE APPROXIMATELY TWO ACRES. THIS ESTIMATE IS WITHIN 20% OF THE ORIGINAL 2 ACRES PREDICTED AND THEREFORE CONSIDERED ACCURATE

14. Data Base: FIELD INVESTIGATION JULY 24 1984

15. Summary: (Code 1)

PREDICTION CONSIDERED ACCURATE BASED ON EXAMINATION PROVIDED IN ABOVE SECTION OF ACTUAL CURRENT CONDITIONS

16. Regulations in Effect:

A. Baseline: 40 CFR PART 6 40 CFR PART 35

Today: SAME

B. Baseline: 40 CFR 6.203 6.302 APPENDIX 2

Today: SAME

C. Baseline: 40 CFR 35.917

Today: SAME

17. Reviewer: MLP **18. Date of Review: Year** 1984 **Month** 07 **Day** 24

19. Title of Narrative Report: FIELD INV RPT MENASHA WIS

20. Location of Narrative Report:

Evaluation Form

1. Project Name. DRAFT SUPPLEMENTAL DEIS

2. Needs(Facility) No. 27-0-0-0-0-0-1 NPDES No. _____

   Grant No. 2-3-3-7-5-0-0-2

3. Date of Document: Year 1979 Month 05 Day 30

4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☑ e. Negative Dec. ☐ f. FNSI ☐

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: _____

   45-19-15N--096-27-00W 45-16-30N--096-27-00W

   45-19-15N--096-22-30W 45-16-30N--096-22-30W

   --N--W --N--W

6. Issue: WETLANDS Parameter: BIOLOGICAL ECOLOGICAL

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

   CONSTRUCTION OF FOUR STABILIZATION POND SYSTEM ON 80 ACRES WOULD HAVE VERY MINIMAL EFFECT ON NATURAL WETLANDS BASINS

9. Source of NEPA Document Data: USFWS FIELD INSPECTION

10. Baseline Conditions: Year 1979

    80 ACRES FOR STABILIZATION PONDS CONSTITUTES A VERY SMALL ANY WETLANDS BASINS WITHIN APPEAL HAVE ALREADY BEEN AFFECTED TO SOME DISTURBANCE FROM FARMING

11. Predicted for end of planning period: Year 1989

    NO ADDITIONAL ADVERSE EFFECTS TO WETLANDS BASINS WOULD OCCUR

12. Predicted for current year: Year 1984

SAME AS END OF PLANNING PERIOD

13. Actual current conditions:

FOUR PONDS AND SURROUNDING ACRES AREA AMOUNTS TO 80 ACRES. SOME FILLING IN ONE CORNER TO EQUALIZE TOPOGRAPHY

14. Data Base: FIELD INVESTIGATION JULY 27 1984

15. Summary: (Code 11)

TO THE EXTENT THAT BASELINE CONDITIONS CAN BE RECONSTRUCTED FOR COMPARISON WITH ACTUAL CONDITIONS, PREDICTIONS APPEAR ACCURATE

16. Regulations in Effect:

A. Baseline: 40 CFR PART 61 40 CFR PART 35

Today: SAME

B. Baseline: EPA EO 11900 PRM 76-4

Today: 40 CFR 61.40-61.302 APPENDIX A

C. Baseline: 40 CFR 125.10-17

Today: SAME

17. Reviewer: ALP **18. Date of Review: Year** 1984 **Month** 07 **Day** 27

19. Title of Narrative Report: FIELD REPORT CORTONVILLE MN

20. Location of Narrative Report:

Evaluation Form

1. Project Name. CRTONE EMINENT DOMAIN

2. Needs(Facility) No. 27110401 NPDES No. _____

   Grant No. 27124500 2

3. Date of Document: Year 1979 Month 05 Day 30

4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. X f. FNSI ___

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: _____

   45-19-15N--096-27-00W 45-16-30N--096-27-00W

   45-19-15N--096-03-30W 45-10-30N--096-03-30W

   -- -- -- N-- -- -- -- W -- -- -- N-- -- -- -- W

6. Issue: WETLANDS Parameter: BOUNDARY ENCROACHMENT

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

   CONSTRUCTION MAY ENCROACH INTO LONG NARROW TYPE 3 WETLAND LOCATED SOUTH OF PROPOSED SITE

9. Source of NEPA Document Data: USFWS FIELD INSPECTION

10. Baseline Conditions: Year 1979

    1979 AERIAL PHOTOGRAPHS SHOW PRESENCE OF DEER BEDS WITHIN AREA OF PATH OF ALTERNATE FEED

11. Predicted for end of planning period: Year 1999

    LOSS OF SOME PORTION OF DESCRIBED WETLAND FROM CONSTRUCTION OF FACILITY

12. Predicted for current year: Year 1984

SAME AS END OF PLANNING PERIOD

13. Actual current conditions:

ELONGATED TYPE 3 WETLAND ADJACENT TO SOUTHERN BORDER OF POND. OBSERVED TO HAVE SOME OPEN WATER. COULD NOT DETERMINE WHETHER SIZE OF WETLAND WAS ANY DIFFERENT FROM PRE-CONSTRUCTION TIME

14. Data Base: FIELD INVESTIGATION JULY 27 1984

15. Summary: (Code 2 **)**

WETLAND STILL EXISTENCE BUT COULD NOT EVALUATE ACCURACY OF ENCROACHMENT PREDICTION BECAUSE OF INSUFFICIENT BASELINE INFORMATION

16. Regulations in Effect:

A. Baseline: 40 CFR PART 6 40 CFR PART 35

Today: SAME

B. Baseline: EPA EO 11990 PRM 76-1

Today: 40 CFR 6.203 6.302 APPENDIX A

C. Baseline: 40 CFR 35.

Today: SAME

17. Reviewer: MLP **18. Date of Review: Year** 1984 **Month** 07 **Day** 27

19. Title of Narrative Report: FIELD REPORT PORTONVILLE MN

20. Location of Narrative Report:

Evaluation Form

1. **Project Name.** DRYONVILLE MINNESOTA

2. **Needs(Facility) No.** 27-2400 **NPDES No.**

   Grant No. 27-2240

3. **Date of Document: Year** 1979 **Month** 05 **Day** 30

4. **Type of Document: a. EIS** ☐ **b. EA** ☐ **c. EID** ☐ **d. Facilities Plan** ☐ **e. Negative Dec.** ☑ **f. FNSI** ☐

5. **Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction:**

   45-19-15N--096-27-00W 45-16-30N--096-27-00W

   45-19-15N--096-03-30W 45-16-30N--096-03-30W

   --N-- -- -- --W --N-- -- -- --W

6. **Issue:** WETLAND **Parameter:** SIZE

7. **Type of Impact:** 1 **(1=Quantiative) (2=Qualitative)**

8. **Prediction:**

   30 WETLAND BASINS TOTALING 18.6 ACRES MAY NOT BE FILLED BURNED OR DRAINED DURING USE OF 120 ACRE SITE FOR SPRAY IRRIGATION

9. **Source of NEPA Document Data:** DATA FIELD INSPECTION

10. **Baseline Conditions: Year** 1979

    30 SEPARATE WETLAND BASINS (18.6 ACRES) EXIST WITHIN 120 ACRE SITE INTENDED TO RECEIVE WASTEWATER EFFLUENT

11. **Predicted for end of planning period: Year** 1999

    WETLAND PARCELS REMAIN WITHIN SITE WHEN IRRIGATION SITE

12. Predicted for current year: Year 1984

SAME AS END OF PLANNING PERIOD

13. Actual current conditions:

ALL MAJOR WET AREAS IDENTIFIED BY VISITS WERE OBSERVED WITHIN IRRIGATION CIRCLES. NO EVIDENCE OF FLOODING IN IRRIGATION CIRCLES.

14. Data Base: FIELD INVESTIGATION JULY 27 1984

15. Summary: (Code)

FIELD OBSERVATIONS

16. Regulations in Effect:

A. Baseline: 40 CFR PART 6 40 CFR PART 35

Today: SAME

B. Baseline: EPA EO 11990 PRM 76-1

Today: 40 CFR 6.203 6.302 APPENDIX A

C. Baseline: 40 CFR 35.917-1

Today: SAME

17. Reviewer: MAP 18. Date of Review: Year 1984 Month 07 Day 27

19. Title of Narrative Report: FIELD INVESTIGATION MILLCREEK MP

20. Location of Narrative Report:

Evaluation Form

1. **Project Name.** CUYAHOGA VALLEY INTERCEPTOR

2. **Needs(Facility) No.** 3916691 **NPDES No.**

Grant No. 391126030C [illegible] 391126070C

3. **Date of Document: Year** 1975 **Month** 10 **Day** E.S DATE: 1976, SEPTEMBER

4. **Type of Document: a. EIS** 1 **b. EA** 1 **c. EID** ☐ **d. Facilities Plan** ☐ **e. Negative Dec.** ☐ **f. FNSI** ☐

5. **Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction:** CUYAHOGA AND SUMMIT COUNTIES OHIO

41-30-00 N--081-22-30 W 41-15-00 N--081-22-30 W

41-30-00 N--081-45-00 W 41-15-00 N--081-45-00 W

\-\- N-- - - W - - N-- - - W

6. **Issue:** WETLANDS **Parameter:** SIZE

7. **Type of Impact:** 1 **(1=Quantiative) (2=Qualitative)**

8. **Prediction:**

TUNNEL CONSTRUCTION REQUIRES ACCESS SHAFTS WHERE SURFACE DISRUPTION IS APPARENT AND WILL REQUIRE AN AREA OF ABOUT 1 TO 2 ACRES FOR EQUIPMENT, STORAGE AND WORK SPACE DURING TUNNELING.

9. **Source of NEPA Document Data:** NOT APPLICABLE

10. **Baseline Conditions: Year** 1975

CONDITIONS VARY ACCORDING TO SITES FROM PREVIOUSLY DISTURBED TO UNDISTURBED.

11. **Predicted for end of planning period: Year** 1995

SITES TO BE REGRADED TO ORIGINAL TOPOGRAPHY AND REVEGETATED. EXCESS SPOILS AND CONSTRUCTION DEBRIS TO BE REMOVED.

12. Predicted for current year: Year 1984

SITES WARRANT PROGRESS OF REMEDIATION

13. Actual current conditions:

SITES VARY FROM COMPLETELY RESTORED AND RELEGATED TO SITES IN ACTIVE CONSTRUCTION

14. Data Base: FIELD INVESTIGATIONS OF 7-19-84

15. Summary: (Code)

EXTENT OF REMEDIATION VARIES DEPENDING ON SITE. CONSTRUCTION HAS NOT YET BEEN COMPLETED AT ALL ACCESS SITES

16. Regulations in Effect:

A. Baseline: EPA PROGRAM GUIDANCE MEMO FOR

Today: 40 CFR PART 61 - NESHAPS

B. Baseline: EPA METHANE PROTECTION PLANS

Today: 40 CFR 61.03 & 61.05 APPENDIX A

C. Baseline:

Today: 40 CFR 261.7

17. Reviewer: [illegible] 18. Date of Review: Year 1984 Month [illegible] Day 19

19. Title of Narrative Report: SITE FIELD INVES. REPORT

20. Location of Narrative Report:

Evaluation Form

1. Project Name. CAYAGUA VALLEY INTERCEPTOR

2. Needs(Facility) No. 39166011 NPDES No.

Grant No. 391120103010 Kharger 391126070 C

3. Date of Document: Year 1976 Month 10 Day EIS Case, 1976, SEPTEMBER

4. Type of Document: a. EIS ☑ b. EA ☐ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☐

5 Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: CUYAHOGA AND SUMMIT COUNTIES OHIO

41-30-00N--081-22-30W 41-15-00N--081-24-30W

41-30-00N--081-45-00W 41-15-00N--081-45-00W

--N-- --W --N-- --W

6.Issue: WETLANDS Parameter: SIZE

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

ACCESS STRAIT #17 IS LOCATED IN A WETLAND AREA DOMINATED BY SAWTARY RA AND CONTAINS A SMALL WILLOW THICKET. THE PRESENCE OF SATTAILS AND WILLOWS ATTEST TO THE CONSTANT SUBMERGED CONDITIONS.

9. Source of NEPA Document Data: MOV AGENCIES

10. Baseline Conditions: Year 1975 .

AFEA CONTAINS A SMALL WILLOW THICKET THE PRESENCE OF SATTAILS AND WILLOWS ATTEST TO THE CONSTANT SUBMERGED CONDITIONS.

11. Predicted for end of planning period: Year 1985

A MODIFICATION OF THE WETLAND WILL BE AFFECTED.

12. Predicted for current year: Year 1984

A MAXIMUM OF 1.02 ACRES OF THE WETLAND WILL BE AFFECTED. THE SITE WILL GROW TO A 12x15 CONCRETE SLAB AT GRADE WITH A SEALED MANHOLE COVER.

13. Actual current conditions:

THE AREA IS CHARACTERIZED BY WETLAND SWITH CATTAILS AND WILLOWS AS THE DOMINANT SPECIES. AT 2'19' CONCRETE SLAB AND MANHOLE WERE PRESENT AND THE ONLY EVIDENCE OF DISTURBANCE

14. Data Base: FIELD INVESTIGATION OF 7-19-84

15. Summary: (Code ___)

NO DEVIATION BETWEEN FICTUAL AND ARED VIEW AVAILT.

16. Regulations in Effect:

A. Baseline: EPA PROGRAM SUBJECT MEMO 4510

Today: 404 CFR PART 10 404 CFR PART 230

B. Baseline: EPA WETLAND PROTECTION POLICY

Today: 404 CFR 10.2(a)(3) 10.2(a)(2) APPENDIX A

C. Baseline:

Today: 404 CFR 230.9(17)-11

17. Reviewer: WTE 18. Date of Review: Year 1984 Month 07 Day 19 AND 20

19. Title of Narrative Report: CIVIL FIELD INVES. REPORT

20. Location of Narrative Report:

Evaluation Form

1. Project Name. CIVIC-LOCAL AVAILABILITY INTERPRETER

2. Needs(Facility) No. 5-1/6/2-1/ NPDES No.

Grant No. 391/1261030 through 391/26070C

3. Date of Document: Year 1975 Month 10 Day MA

4. Type of Document: a. EIS ☐ b. EA ☑ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☐

5 Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: SUMMIT COUNTY OHIO

41-30-00N--081-22-30W 41-15-00N--081-22-30W

41-30-00N--081-45-00W 41-15-00N--081-45-00W

--N-- --W --N-- --W

6.Issue: WETLANDS Parameter: SIZE

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

ALSMALL PORTION OF ACCESS SHAFT WILL REQUIRE FILL. THE AREA WAS CHANGED TO MINIMIZE DAMAGE TO A WETLAND. A PORTION OF THE WETLAND WILL STILL BE MODIFIED BUT THE MODIFICATION IS MINIMIZED AND CONSIDERED AT ONE END OF THE WETAREA

9. Source of NEPA Document Data: SUPPLIED MOST DOCUMENTED

10. Baseline Conditions: Year 1975

MUCH OF THIS LOW LYING AREA WAS SUBJECT EPLOTED AND A PORTION OF THE AREA WAS KEEN FEMOVED AS A BORROW PIT FOR THE RAILROAD GRADING

11. Predicted for end of planning period: Year 1985

A PORTION OF THE WETLAND WILL BE MODIFIED BUT THE MODIFICATION IS MINIMIZED AND CONSIDERED AT ONE END OF THE WETAREA

12. Predicted for current year: Year 1984

LESS THAN ONE TO TWO ACRES WILL BE AFFECTED. THE AFFECTED AREA WILL BE CONSOLIDATED AT THE EDGE OF THE WETLAND.

13. Actual current conditions:

WETLANDS DISRUPTED BY ACCESS ROAD TO SITE. APPROXIMATELY TWO ACRES AROUND THE SKIFF WAS COVERED WITH TUNNEL CONSTRUCTION DEBRIS FROM A DEPTH OF BETWEEN 4 TO 6 FEET. VEGETATION TO THE N. OF THE SITE INDICATES ENCROACHMENT BUT THE DEGREE COULD NOT BE DETERMINED.

14. Data Base: FIELD INVESTIGATION OF 7-19-84

15. Summary: (Code 20)

LACK OF ADEQUATE DATA BASE PREVENTS ADEQUATE DETERMINATION OF THE EXTENT OF IMPACTED AREA. LAND IS PRIVATELY OWNED AND OWNER REQUESTED ALLOWING USE OF SITE AS PROVISION FOR ACCESS TO SITE

16. Regulations in Effect:

A. Baseline: EPA CROSS-MEDIA GUIDANCE MEMO #50

Today: 40 CFR PART 6, 40 CFR PART 35

B. Baseline: EPA WETLAND POLICY 1981 (018E4)

Today: 40 CFR 230.10, 6.302, APPENDIX A

C. Baseline:

Today: 40 CFR 35.9117-1

17. Reviewer: WTF 18. Date of Review: Year 1984 Month 07 Day 19

19. Title of Narrative Report: CAT FIELD INVES. REPORT

20. Location of Narrative Report:

Evaluation Form

1. Project Name. SUVAGOGA ALLEY INTERCEPTOR

2. Needs(Facility) No. 391160001 NPDES No.

Grant No. 391121603010 THROUGH 391126070C

3. Date of Document: Year 1975 Month 10 Day

4. Type of Document: a. EIS b. EA ☑ c. EID d. Facilities Plan e. Negative Dec. f. FNSI

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: SUMMIT AND CUYAHOGA COUNTIES OHIO

41-30-00N--081-32-30W 41-15-00N--081-24-30W

41-30-00N--081-32-45W 41-15-00N--081-45-00W

N--W N--W

6. Issue: WETLANDS Parameter: POTENTIAL FOR INCREASED WET

7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)

8. Prediction:

A SMALL MARSHY WETLAND AREA LIES TO THE NORTH AND EAST OF THE SITE (NO IMPACT IMPACTED).

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1975

SAME AS EB ABOVE

11. Predicted for end of planning period: Year

ALLOWED THE AREA TO BE FILLED AND ESTORE ACCESS SHALL BE WILL EXPERIENCE NO IMPACT.

12. **Predicted for current year: Year** 1984

(IMPACTED) NO IMPACT TO THE WETLANDS

13. **Actual current conditions:**

THE WETLAND AREAS TO THE NORTH OF ACCESS SHAFT #5 WAS NOT BEEN AFFECTED. SPECIAL MATERIAL FROM THE VALLEY VIEW TRUNK CONNECTION WAS DEPOSITED IN A WETLAND AREA IMMEDIATELY SOUTH OF THE EXAVATION VENT MANHOLE.

14. **Data Base:** FIELD INVESTIGATION OF 7-19-84

15. **Summary:** (Code 1)

THE LAND OWNER WAS REQUESTED IS IN AREA WITH OWNERS. THE OWNER REQUESTED THAT THE WETLAND AREA BE FILLED AS A STIPULATION OF THE PROVIDING OF ACCESS TO THE CONSTRUCTION SITE. THE LAND OWNER WAS BEING INVOLVED IN FILLING THE WETLAND AREAS PRIOR TO CONSTRUCTION OF THE GUT.

16. **Regulations in Effect:**

A. **Baseline:** EPA PROGRAM GUIDANCE MEMO #50

Today: 40 CFR PART 6 40 CFR PART 35

B. **Baseline:** EPA WETLAND POLICY 38 FR 10834

Today: 40 CFR 6.203 6.302 APPENDIX A

C. **Baseline:**

Today: 40 CFR 35.9171-1

17. **Reviewer:** KTE 18. **Date of Review: Year** 1984 **Month** 07 **Day** 19

19. **Title of Narrative Report:** GUT FIELD INVEST. REPORT

20. **Location of Narrative Report:**

Evaluation Form

1. Project Name. SUNA AGEA VALLEY INTERCEPTOR

2. Needs(Facility) No. 391661001 NPDES No. _____

Grant No. 391126010C through 391126070C

3. Date of Document: Year 1979 Month 10 Day 24

4. Type of Document: a. EIS ☐ b. EA ☑ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☐

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: SUMMIT AND CUYAHOGA COUNTIES OHIO

41-30-06N--081-12-30W 41-15-00N--081-12-30W

41-30-00N--081-45-00W 41-15-00N--081-45-00W

--N-- --W --N-- --W

6. Issue: HISTORIC Parameter: PUBLIC ENCROACHMENT

7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)

8. Prediction:

MUCH OF THIS AREA LIES IN A MARSH AT THE FOOT OF THE VALLEY WALL ALTHOUGH THE LOCATION OF THE ACCESS SHAFT IS ON THE SLOPE OF THE HILL

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1975

SAME AS #9 ABOVE

11. Predicted for end of planning period: Year 1990

CUMULATED IMPACT WOULD BE A GENERAL CONSTRICTION OF ACCESS SHAFT

#8

12. Predicted for current year: Year 1984

(IMPLIED) NO IMPACT TO WETLANDS FROM THE CONSTRUCTION OF ACCESS SHAFT AB

13. Actual current conditions:

ACCESS SHAFT LOCATED AT THE BASE OF A HILL ADJACENT TO AN AREA CONSIDERED LAND FILL. TUNNEL CONSTRUCTION DEBRIS CONTAINS AN AREA OF APPROX. 1/4 ACRE FROM A DEPTH OF 3 FT AT S. TO 1 FT AT N. WETLAND AREA IS IMMEDIATELY ADJACENT TO SE EXTENT OF FILL INDICATES EMERGENCY

14. Data Base: FIELD INVESTIGATION OF 7-11-84

15. Summary: (Code 1-11)

EXTENT OF EMERGENCY WORK COULD NOT BE DETERMINED DUE TO INADEQUATE DATA BASE.

16. Regulations in Effect:

A. Baseline: EPA PROGRAM GUIDANCE MANUAL #50

Today: NO CEA AFFECT NO 404 PERMIT 35

B. Baseline: EPA WETLAND POLICY 32 FR 10331

Today: NO CEA 5.2032 5.3032 AFFECTED

C. Baseline:

Today: NO CEA 35.9117-1

17. Reviewer: WTA 18. Date of Review: Year 1984 Month 12 Day 13

19. Title of Narrative Report: RVD FIELD INVEST REPORT

20. Location of Narrative Report:

Evaluation Form

1. Project Name. COWAWOGA VALLEY INTERCEPTOR

2. Needs(Facility) No. 391999 NPDES No.

Grant No. 391126030 through 391126070C

3. Date of Document: Year 95 Month 12 Day

4. Type of Document: a. EIS b. EA c. EID d. Facilities Plan e. Negative Dec. f. FNSI

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: SALT LAKE AND COTTONWOOD COUNTIES OF UTAH

41-30-00N--121-33-30W 41-15-00N--081-23-30W

41-30-00N--081-45-00W 41-15-00N--081-45-00W

--N-- --W --N-- --W

6. Issue: WETLANDS Parameter: BIOLOGICAL EXCAVATION

7. Type of Impact: (1=Quantitative) (2=Qualitative)

8. Prediction:

ACCESS CREEK HAS WITHIN A WETLAND AREA SOUTH OF PLEASANT VALLEY RD. THE SITE AND WATERFOWL TRUCKS WERE MOVED TO A CLEARING ON FULL DISTRICT OF THE RD

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1975

SURFACE WATERS ASSOCIATED GRADING AND SOIL REMOVAL FROM THIS AREA. THE AREA IS CURRENTLY BEING FILLED WITH PUMICE.

11. Predicted for end of planning period: Year 1995

ALTERED BY MOVEMENT TO ADJACENT WETL AND PRESENT CONDITIONS ARE LIMITED.

12. Predicted for current year: Year 1984

SAME AS 84

13. Actual current conditions:

THE ACCESS SHAFT HAD BEEN MOVED CLOSER TO THE ADIT IN THE AREA OF FILL AS PROPOSED. THE ADITAGE WETLANDS TO THE WEST AND SOUTH ARE VISIBLE AND APPARENTLY UNAFFECTED.

14. Data Base: FIELD INVESTIGATION OF 7-19-84

15. Summary: (Code 11)

WITNESSED MEASURED PROPOSED WERE FILEMETED IN MITIGATING IMPACTS.

16. Regulations in Effect:

A. Baseline: 404 PROGRAM GUIDANCE MEMO 85-01

Today: 40 CFR PART 6 40 CFR PART 35

B. Baseline: 404 WETLANDS POLICY 38 FR 10234

Today: 40 CFR 6.2(a)(3) 6.302 APPENDIX A

C. Baseline:

Today: 40 CFR 35.917-1

17. Reviewer: LHE 18. Date of Review: Year 1984 Month 07 Day 19

19. Title of Narrative Report: CWA ANNUAL REPORT

20. Location of Narrative Report:

Evaluation Form

1. Project Name. CUYAHOGA VALLEY INTERPRETIVE

2. Needs(Facility) No. 391/46901 NPDES No. _____

Grant No. 391/1/46013010 through 391/26070 C

3. Date of Document: Year 1975 Month 10 Day NA

4. Type of Document: a. EIS ☐ b. EA ☒ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☐

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: SUMMIT AND CUYAHOGA COUNTIES OHIO

41-30-00N--081-22-30W 41-15-00N--081-22-30W

41-30-00N--081-45-00W 41-15-00N--081-45-00W

--N--W --N--W

6. Issue: WETLANDS Parameter: FOUND ENCROACHMENT

7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)

8. Prediction:

ACCESS STRAFT HAS WAS MOVED TO A HIGHER AND DRIER AREA. ADDITIONAL EASEMENTS ARE NOW PROVIDED EAST OF THE ALLIGAMENT IN A DRIER AREA.

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1975

SAME AS FOR ABOVE. ALSO ADJACENT AREA AS A DEVELOPED URBANIZED AREA OF SUMMIT COUNTY.

11. Predicted for end of planning period: Year 1995

NONE ASSESSED. MALLEA IN WRIT TO WETLANDS.

12. Predicted for current year: Year 1984

SAME AS #11 ABOVE

13. Actual current conditions:

AN AREA OF ABOUT 1112 ACRES AROUND THE ALUETO TO A DEPTH OF BETWEEN 1 AND 3 FT. MITIGATION MESEARET WHACEMENTE D.

14. Data Base:

15. Summary: (Code)

REMOVAL OF EXCESS DEBRIS AND REGRADING TO ORIGINAL TOPOGRAPHY IS PLANNED FOR 1984. AREA WILL ALSO BE MESETOE

16. Regulations in Effect:

A. Baseline: EPA PROGRAM GUIDANCE MEMO #70

Today: 40 CFR PART 61 40 CFR PART 35

B. Baseline: EPA WETLANDS FEDERAL REG 38 FR 10234

Today: 40 CFR 6.203 6.302 APPENDIX A

C. Baseline:

Today: 40 CFR 35.917-1

17. Reviewer: 18. Date of Review: Year 1984 Month Day

19. Title of Narrative Report:

20. Location of Narrative Report:

Evaluation Form

1. Project Name. COYAHOGA VALLEY INTERPRETOR

2. Needs(Facility) No. 391/6101 NPDES No. _____

Grant No. 391/2603 through 391/26070 C

3. Date of Document: Year 1975 Month 10 Day 24

4. Type of Document: a. EIS ☐ b. EA ☑ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☐

5 Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: SUMMIT AND CUYAHOGA COUNTIES OHIO

41-30-00N--081-25-30W 41-15-00N--081-22-30W

41-30-00N--081-45-00W 41-15-00N--081-45-00W

--N--W --N--W

6.Issue: WETLANDS Parameter: SITE

7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)

8. Prediction:

ACCESS SHEET 4/6 IS LOCATED ON A SOW EVALUATED ALSO BETWEEN TWO OLD RIVER CHANNELS THAT ARE WOW WETLANDS AND SANITARY PROJ. THE PROPOSED ACCESS WILL CROSS A SMALL PORTION OF WETLAND AT SANITARY PROJ. WHICH WILL BE TEMPORARILY FILLED.

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1975

SAME AS #8 ABOVE.

11. Predicted for end of planning period: Year 1995

ALMOST NO CHANGE EXPECTED.

12. Predicted for current year: Year 1984

ALTERATION OF WETLANDS ALONG SCUTTLE
BUTT WILL BE FILLED TO PROVIDE ACCESS
TO THE SITE.

13. Actual current conditions:

APPROXIMATELY 11.3 TO 12 ACRES AROUND
THE SHAFT HAD BEEN FILLED WITH CONST
RUCTION DEBRIS. THE DEBRIS DOES NOT
APPEAR TO OCCUR OR IMPACT ANY POTTO
DE MADJACENT WETLANDS

14. Data Base: FIELD INVESTIGATION OF 7-20-84

15. Summary: (Code T)

ALL CONSTRUCTION DEBRIS AND THE ACCE
SS ROAD ARE TO BE REMOVED, REGRADED
TO ORIGINAL TOPOGRAPHY AND RESEEDED
IN OCTOBER 1984

16. Regulations in Effect:

A. Baseline: EPA PROGRAM GUIDANCE MEMO #50
Today: 40 CFR PART 61 40 CFR PART 35

B. Baseline: EPA WETLANDS POLICY 38 FR 10834
Today: 40 CFR 6.203 6.302 APPENDIX A

C. Baseline:
Today: 40 CFR 35.9170-1

17. Reviewer: WTE 18. Date of Review: Year 1984 Month 02 Day 20

19. Title of Narrative Report: CINE FIELD INVESTIGATION

20. Location of Narrative Report:

Evaluation Form

1. Project Name. CIVIC-OCEAN ALKALI INTERCEPTOR

2. Needs(Facility) No. 39169001 NPDES No. _____

   Grant No. 391126030C Change 39112 6070 C

3. Date of Document: Year 1975 Month 10 Day NA

4. Type of Document: a. EIS ☐ b. EA ☑ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☐

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: SUNNYVALE

   CUPERTINO CLOVERDALE

   41-30-00N--122-24-30W 41-15-00N--122-41-00W

   41-30-00N--122-45-00W 41-15-00N--122-45-00W

   -- -- -- N-- -- -- -- W -- -- -- N-- -- -- -- W

6. Issue: WETLANDS Parameter: SIZE

7. Type of Impact: ☐ (1=Quantitative) (2=Qualitative)

8. Prediction:

   IN THE UNNEL CONSTRUCTION THERE IS A RISK OF EQUIPMENT PROBLEMS IN THE TUNNEL WHICH COULD REQUIRE AN ADDITIONAL START IT IS IMPOSSIBLE TO PREDICT WHERE SUCH A PROBLEM COULD OCCUR. IF IT DOES ADVERSELY AFFECT THE WETLANDS

9. Source of NEPA Document Data: SOURCE NOT DOCUMENTED

10. Baseline Conditions: Year 1975

    A TOTAL OF 12 ACCESS STATIONS PROPOSED AT SEVERAL LOCATIONS IN THE PROJECT AREA

11. Predicted for end of planning period: Year 1985

    THERE IS A POSSIBILITY DEPENDING ON THE DEVELOPMENT PROJECTS IN THE PLANNING AREA THAT ADDITIONAL ACCESS WETLANDS.

12. Predicted for current year: Year 1984

NO IMPACT IMPACTED

13. Actual current conditions:

EQUIPMENT PROBLEMS WERE ENCOUNTERED WHICH REQUIRED THE CONSTRUCTION OF A DITTIONAL ACCESS SITES. THE RESULTS OF THIS CONSTRUCTION HOWEVER DID NOT IMPACT ON WETLANDS IN THE STUDY AREA.

14. Data Base: FIELD INVESTIGATION OF 7-19-84

15. Summary: (Code 1)

IMPACTS WERE TO PREVIOUSLY DISTURBED AREAS OUTSIDE WETLANDS.

16. Regulations in Effect:

A. Baseline: EPA PROGRAM GUIDANCE MEMO #50

Today: 404 CFR PART 6 & 404 KITE PART 230

B. Baseline: EPA WETLAND POLICY 32 FR 12591

Today: 40 CFR 6.2013 & 230.2 APPENDIX A

C. Baseline:

Today: 40 CFR 230.10-1

17. Reviewer: DTS 18. Date of Review: Year 1984 Month 07 Day 19

19. Title of Narrative Report: CUT FIELD ANALYSIS REPORT

20. Location of Narrative Report:

Evaluation Form

1. Project Name. CUYAHOGA VALLEY INTERCEPTOR

2. Needs(Facility) No. 391660101 NPDES No. _____

Grant No. 391121693010 through 391126070 C

3. Date of Document: Year 1976 Month 09 Day 24

4. Type of Document: a. EIS ✓ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. ___ f. FNSI ___

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: SUMMIT AND CUYAHOGA COUNTIES OHIO

41-30-00N--081-22-30W 41-15-00N--081-24-30W

41-30-00N--081-45-00W 41-15-00N--081-45-00W

__-__-__N--__-__-__W __-__-__N--__-__-__W

6. Issue: WETLANDS Parameter: AREA, SIZES

7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)

8. Prediction:

WE SUSPECT THAT THE TUNNEL CONSTRUCTION MAY HAVE A DRAINING EFFECT ON DEWATERED ADJACENT WETLANDS

9. Source of NEPA Document Data: COMMENT LETTER

10. Baseline Conditions: Year 1975

PRESENT WETLAND LOCATIONS IN THE CUY AREA WERE NOT RECEIVED IN THAT IS

11. Predicted for end of planning period: Year 1995

POSSIBLE LOSS OF WETLANDS

12. Predicted for current year: Year 1984

POSSIBLE LOSS OF WETLANDS

13. Actual current conditions:

NO CHANGE OCCURRED LOSS OF WETLANDS WAS SEVERE

14. Data Base: FINAL WASTEWATER DEC 7-1984

15. Summary: (Code 00)

THIS WAS AN UNAMENDED CONTRACT

16. Regulations in Effect:

A. Baseline: EPA PROGRAM GUIDANCE MEMO #50

Today: 40 CFR PART 6 40 CFR PART 35

B. Baseline: EPA WETLANDS EO 11990 38 FR 11314

Today: 40 CFR 6.203 6.302 EFFECTIVE

C. Baseline:

Today: 40 CFR 35.9117-1

17. Reviewer: EDE 18. Date of Review: Year 1984 Month 07 Day 19

19. Title of Narrative Report: FINAL FEASIBILITY REPORT

20. Location of Narrative Report:

Evaluation Form

1. Project Name. CUYAHOGA VALLEY INTERCEPTOR

2. Needs(Facility) No. 391160011 NPDES No. _____

Grant No. 391126013010 Change: 391126070 C

3. Date of Document: Year 1976 Month 02 Day 06

4. Type of Document: a. EIS ☑ b. EA ☐ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☐

5 Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: CUYAHOGA COUNTY OHIO

41-30-00N--081-22-30W 41-15-00N--081-24-30W

41-30-00N--081-45-00W 41-15-00N--081-45-00W

--N-- --W --N-- --W

6.Issue: WETLANDS Parameter: SIZE, NUMBER, EXTENT

7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)

8. Prediction:

LOWERING OF THE WATER LEVEL WILL DRAIN SOME OF THE NORMALLY FLOODED WETLANDS.

9. Source of NEPA Document Data: COMMENT LETTER

10. Baseline Conditions: Year 1973

THE EXISTING SIZE AND NUMBER OF WETLANDS IN THE PROJECT AREA WERE NOT PRESENTED, DESCRIBED, REFERENCED OR DOCUMENTED FOR THE BASELINE YEAR

11. Predicted for end of planning period: Year 1985

POSSIBLE LOSS OF WETLANDS

12. Predicted for current year: Year 1984

SAME AS #11

13. Actual current conditions:

NO EVIDENCE COULD BE FOUND WHICH SUPPORTS THIS UNANTICIPATED IMPACT ADDITION

14. Data Base: FIELD INVESTIGATION OF 1979-1984

15. Summary: (Code 010)

WADE DATE DATA BASE PROVIDES THE EVALUATION OF THIS UNANTICIPATED IMPACT

16. Regulations in Effect:

A. Baseline: EPA PROGRAM GUIDANCE MEMO #570

Today: 40 CFR PART 40 PER PART 35

B. Baseline: EPA WETLAND POLICY 1/ 5/ 5/ 0131

Today: 40 CFR 230.3 6.3012 A 2 E 1 1 1 A

C. Baseline:

Today: 40 CFR 35.9117 1

17. Reviewer: MTE 18. Date of Review: Year 1984 Month 07 Day 10

19. Title of Narrative Report: CITY FIELD INVEST. REPORT

20. Location of Narrative Report:

APPENDIX B

DATA BASE FOR PROTOTYPE REPORT
IMPACTS OF POPULATION PREDICTIONS

TABLE B-1

PLACE ANALYSIS FOR ILLINOIS:
PERCENT DIFFERENCE BETWEEN ACTUAL
AND PROJECTED 1980 POPULATION

OBS	STATE	AREANAME	CONSULT	T1I1	PROJ80	PERDIF
1	17	ALEXIS	MISSMAN STANLEY FARMER & ASSOC	1099	987	-9.366
2	17	ALPHA	DEVORE-BOBB & ASSOC	815	790	-3.067
3	17	ANNAWAN	MISSMAN STANLEY FARMER & ASSOC	908	895	-1.432
4	17	ASSUMPTION	WARREN & VAN PRAAG INC	1293	1516	18.161
5	17	BALDWIN	KLEBERGER & ASSOC INC	478	500	4.603
6	17	BRIDGEPORT	CONNOR & CONNOR, INC.	2281	2545	11.574
7	17	BUREAU JUNCTION	WILLETT HOFMANN & ASSOC INC	462	476	3.030
8	17	CAMBRIDGE	MISSMAN STANLEY FARMER & ASSOC	2217	2421	9.202
9	17	COBDEN	J T BLANKINSHIP & ASSOC	1210	1224	1.157
10	17	EL PASO	FARNSWORTH & WYLIE	2584	2480	-6.907
11	17	FARMER CITY	FARNSWORTH & WYLIE	2252	2428	7.815
12	17	GIRARD	BENTON & ASSOC	2246	2227	-0.846
13	17	HURST	R A NACK & ASSOC	935	1554	65.672
14	17	LEWISTOWN	ANDERSON & ASSOC	2758	2871	4.097
15	17	MANSFIELD	DAILY & ASSOC	921	914	-0.760
16	17	MONMOUTH	MISSMAN STANLEY FARMER & ASSOC	10716	11701	9.574
17	17	MOUNT CARROLL	BAXTER & WOODMAN	1936	2266	17.045
18	17	MOUNT PULASKI	DENNIS E ROBY & ASSOC	1783	1934	8.469
19	17	NILWOOD	M B CORLEW & ASSOC	290	255	-12.069
20	17	PANA	JENKINS MERCHANT & NANKIVIL	6040	6338	4.934
21	17	PATOKA	WATWOOD & FILE INC	663	559	-15.686
22	17	PETERSBURG	CASLER HOLSER & HUTCHINSON INC	2343	2746	17.200
23	17	RUMA		262	164	-37.405
24	17	SHEFFIELD	K H & M ENGINEERING INC	1130	1102	-2.478
25	17	ST. AUGUSTINE	MOOLLRE-MANAHAN ENGINEERING	192	184	-4.167
26	17	SYCAMORE		9219	1019	-88.947
27	17	TOWER HILL	UFCHURCH & ASSOC	679	750	10.457
28	17	WESTFIELD	CONNOR & CONNOR, INC.	721	708	-1.803
29	17	WILLIAMSVILLE	BENTON & ASSOC	996	1217	22.139
30	17	WYOMING	DAILY & ASSOC	1614	1590	-1.487

Note: T1I1 = Actual census count
PROJ80 = NEPA projected population
PERDIF = Percent difference between NEPA prediction and actual census count

TABLE B-2

PLACE ANALYSIS FOR INDIANA:
PERCENT DIFFERENCE BETWEEN ACTUAL
AND PROJECTED 1980 POPULATION

OBS	STATE	AREANAME	CONSULT	T111	PROJ80	PERDIF
31	18	BREMEN	C E WILLIAMS & ASSOC	3565	4157	16.606
32	18	BURLINGTON	COLE ASSOC INC	666	802	20.420
33	18	CARLISLE	BEAM LONGEST & NEFF INC	741	677	-8.637
34	18	DARLINGTON	C E WILLIAMS & ASSOC	816	842	3.186
35	18	DUNKIRK	BUTLER FAIRMAN & SEUFERT	3168	3594	13.447
36	18	EARL PARK	COMMONWEALTH ENGINEERS INC	479	453	-5.428
37	18	ELWOOD	C E WILLIAMS & ASSOC	10865	11256	3.599
38	18	EVANSVILLE	H. B. STEEG ASSOCIATES	130496	138890	6.432
39	18	FRANKFORT	C E WILLIAMS & ASSOC	15168	14966	-1.332
40	18	GALVESTON	C E WILLIAMS & ASSOC	1822	2249	23.436
41	18	GAS CITY	A & E ENGINEERING INC	6370	13231	107.708
42	18	GREENCASTLE	CONSDER TOWNSEND & ASSOC	8403	10476	24.670
43	18	GREENWOOD	FRANKLIN ENGINEERING CO	19327	16418	-15.051
44	18	HAMILTON	C E WILLIAMS & ASSOC	588	1682	186.054
45	18	HEBRON	COLE ASSOC INC	2696	2350	-12.834
46	18	INDIANAPOLIS	REID QUEBE ALLISON WILCOX	700719	172375	-75.400
47	18	KEWANNA	COMMONWEALTH ENGINEERS INC	723	614	-15.076
48	18	LAPEL	C E WILLIAMS & ASSOC	1881	1963	4.359
49	18	LEBANON	C E WILLIAMS & ASSOC	11454	10819	-5.544
50	18	LYNN	H. B. STEEG ASSOCIATES	1250	1405	12.400
51	18	LYNNVILLE	ANDERSON & ASSOC	557	738	32.496
52	18	MARENGO	COMMONWEALTH ENGINEERS INC	892	856	-4.036
53	18	MONROE	COMMONWEALTH ENGINEERS INC	757	670	-11.493
54	18	MONTICELLO	H. B. STEEG ASSOCIATES	5162	5197	0.678
55	18	MOORELAND	BEAM LONGEST & NEFF INC	473	599	26.638
56	18	MORRISTOWN	SULLIVAN & FU	989	966	-2.326
57	18	NEW HAVEN	KEITH L GUTHRIE-CONSULTING ENGI	6714	6819	1.564
58	18	NORTH SALEM	MEEK & HANNAN INC	569	650	14.236
59	18	PORTLAND	H. B. STEEG ASSOCIATES	7074	7125	0.721
60	18	RICHMOND	CLARK DIETZ & ASSOC	41327	55764	34.974
61	18	SHARPSVILLE	STEEG INC	615	1325	115.447
62	18	TIPTON	H. B. STEEG ASSOCIATES	5004	7268	45.242

TABLE B-3

PLACE ANALYSIS FOR MICHIGAN:
PERCENT DIFFERENCE BETWEEN ACTUAL
AND PROJECTED 1980 POPULATION

CBS	STATE	AREANAME	CONSULT	T111	PROJ80	PERDIF
63	26	ALPENA	MCNAMEE PORTER & SEELEY	12214	5977	-51.916
64	26	CAPAC	MCNAMEE PORTER & SEELEY	1377	1340	-2.687
65	26	CASS CITY	HUBBELL ROTH & CLARK INC	2258	2280	0.974
66	26	CHARLOTTE	CAPITOL CONSULTANTS INC	8251	8745	5.987
67	26	COOPERSVILLE	FREIN & NEWHOF	2899	3373	16.753
68	26	CROSWELL	JOHNSON & ANDERSON INC	2073	2054	-0.917
69	26	DE TOUR VILLAGE	GRANGER ENGINEERING INC	480	493	2.708
70	26	FIFE LAKE	GRANGER ENGINEERING INC	412	1505	265.291
71	26	FOWLERVILLE	WOLVERINE ENGINEER CO	2227	2114	-5.074
72	26	GREENVILLE	CAPITOL CONSULTANTS INC	8019	7934	-1.060
73	26	HOLLAND	WILLIAMS & WORKS	26291	53282	102.740
74	26	HOUGHTON	MCNAMEE PORTER & SEELEY	7512	2209	-70.594
75	26	JACKSON	MCNAMEE PORTER & SEELEY	39739	13028	-67.216
76	26	KENT CITY	WILLIAMS & WORKS	863	927	7.416
77	26	KINGSLEY	GRANGER ENGINEERING INC	654	914	39.755
78	26	LAINGSBURG	CAPITOL CONSULTANTS INC	1145	1141	-0.349
79	26	LESLIE	CAPITOL CONSULTANTS INC	2110	2458	16.493
80	26	LEXINGTON	COLLINS ENGINEERING CO	765	1827	138.824
81	26	MENDON	VALENTINE-THOMAS & ASSOC INC	951	371	-60.998
82	26	OAKLEY	R H KRAFT ENGINEERING	404	485	20.050
83	26	PICKFORD	DAVERMAN ASSOC	.	680	.
84	26	REPUBLIC	U P ENGINEERING & ARCH ASSOC	.	1303	.
85	26	ROMEO	CAPITOL CONSULTANTS INC	3511	8047	129.194
86	26	SANDUSKY	K D WILLIAMSON PE	2216	3833	72.969
87	26	SHERIDAN	CAPITOL CONSULTANTS INC	655	842	28.550
88	26	STANDISH	EDMANDS ENGINEERING INC	1264	1708	35.127
89	26	STOCKBRIDGE	WOLVERINE ENGINEER CO	1213	1245	2.638
90	26	UNIONVILLE	EDMANDS ENGINEERING INC	575	736	28.000
91	26	WHITE CLOUD	R H KRAFT ENGINEERING	1101	3047	176.748

Note: No matching place in census data for Nos. 83 & 84

TABLE B-4

PLACE ANALYSIS FOR MINNESOTA:
PERCENT DIFFERENCE BETWEEN ACTUAL
AND PROJECTED 1980 POPULATION

CEN	STATE	AREANAME	CONSULT	T111	PRO80	PERDIF
92	27	BABBITT	R R WALLACE & ASSOC INC	2447	3132	27.993
93	27	BACKUS	WIDSETH SMITH NOLTING & ASSOC	248	271	9.274
94	27	BARNUM	H A KUUSISTO	439	464	5.695
95	27	BARRY	WIDSETH SMITH NOLTING & ASSOC	44	52	18.182
96	27	BATTLE LAKE	RIEKE-CARROLL-MULLER & ASSOC	709	806	13.681
97	27	BIRD ISLAND	K B M	1372	1296	-5.539
98	27	CAMBRIDGE	RALPH THOMAS & ASSOC INC	3170	3609	13.849
99	27	CARLOS	LARSON-PETERSON & ASSOC	351	364	3.704
100	27	CASS LAKE	STEWART & WALKER INC	1001	1424	42.258
101	27	CHATFIELD	SHORT, ELLIOTT, & HENDRICKSON IN	2063	2054	-0.436
102	27	COLOGNE	MCCOMBS-KNUTSON ASSOC INC	554	73	-86.823
103	27	COTTONWOOD	MCCOMBS-KNUTSON ASSOC INC	924	847	-8.333
104	27	CROMWELL	OWEN AYRES & ASSOCIATES, INC	244	191	-21.721
105	27	CYRUS	BONESTROO ROSENE ANDERLIK	345	334	-3.188
106	27	DEER RIVER	STEWART & WALKER INC	907	972	7.166
107	27	DENNISON	BONESTROO ROSENE ANDERLIK	206	176	-14.563
108	27	DONNELLY	TKDA & CAMPBELL & CO	303	314	3.630
109	27	EDSTON	WIDSETH SMITH NOLTING & ASSOC	1599	1530	-4.315
110	27	FRAZEE	LARSON-PETERSON & ASSOC	1284	1152	-10.280
111	27	GOODHUE	HOUSTON ENGINEERING	635	651	2.520
112	27	GOODRIDGE	STEWART & WALKER INC	209	190	-9.091
113	27	HAMBURG	RIEKE-CARROLL-MULLER & ASSOC	466	468	0.429
114	27	HAMPTON	SCHOELL & MADSON INC	307	399	29.967
115	27	HAYFIELD	ZENK H C	1243	1243	0.000
116	27	HOLLAND	DEWILD GRANT RECKERT & ASSOC	233	234	0.429
117	27	IONA	RIEKE-CARROLL-MULLER & ASSOC	254	242	-4.724
118	27	KETTLE RIVER	R R WALLACE & ASSOC INC	179	182	1.676
119	27	LE SUEUR	BOLTON & MENK	3763	3745	-0.478
120	27	LONG PRAIRIE	LARSON-PETERSON & ASSOC	2859	2859	0.000
121	27	OWATONNA	RIEKE-CARROLL-MULLER & ASSOC	18632	18490	-0.762
122	27	PEQUOT LAKES	CONSULTING ENGINEERS DIVERSIFIE	673	729	8.321
123	27	REMER	R R WALLACE & ASSOC INC	393	420	6.870
124	27	ROUND LAKE	NORTHLAND ENG & LANDSURVEYING, IN	479	607	26.722
125	27	ST. JOSEPH	M W CARLEY & ASSOC	2943	1865	-36.629
126	27	WABASHA	TKDA & CAMPBELL & CO	4699	4510	-4.022
127	27	WEST CONCORD	VASSY ASSOC INC	759	799	5.270

TABLE B-5

PLACE ANALYSIS FOR OHIO:
PERCENT DIFFERENCE BETWEEN ACTUAL
AND PROJECTED 1980 POPULATION

OBS	STATE	AREANAME	CONSULT	T111	PROJ80	PERCIF
128	39	ALLIANCE	MALCOLM PIRNIE ENGRS	24315	35648	46.609
129	39	CANAL FULTON	SHISLER HUNSINGER & HOOVER	3481	10359	197.587
130	39	CANTON	F A THOMAS & ASSOC	94730	159499	68.372
131	39	CLEVELAND	CHC M HILL INC	573822	559792	-2.445
132	39	DOYLESTOWN	R C WINEBRENNER & ASSOC	2459	6424	161.244
133	39	EMPIRE	ENGINEERING ASSOC LTD	516	491	-4.845
134	39	GREENVILLE	SNELL ENVIRONMENTAL GROUP	12999	15307	17.755
135	39	HOPEDALE	W E QUICKSALL & ASSOC INC	857	1251	45.974
136	39	JACKSON	BURGESS & NIPLE LTD	6675	7560	13.258
137	39	JOHNSTOWN	EVANS MECHWART HAMBLETON	3158	3819	20.931
138	39	KENT	HAVENS & EMERSON	26164	33243	27.056
139	39	LAKEFIELD	SIECO INC	576	1626	182.292
140	39	LOVELAND	C E WILLIAMS & ASSOC	9169	5157	-43.236
141	39	MARYSVILLE	BURGESS & NIPLE LTD	7414	8477	14.338
142	39	MCCLURE	FINKBEINER PETTIS & STROUT LTD	667	783	17.391
143	39	MIDDLE POINT	FLOYD G BROWNE & ASSOC LTD	729	730	0.137
144	39	MINSTER	C E WILLIAMS & ASSOC	2557	3500	36.879
145	39	MONTPELIER	JONES & HENRY	4431	5365	21.079
146	39	NAPOLEON	JONES & HENRY	8614	9099	5.630
147	39	NEW CONCORD	C E WILLIAMS & ASSOC	1860	303	-83.710
148	39	NEWARK	TALLARICO & HOEFFEL PARTNERS	41200	17596	-57.291
149	39	OAKWOOD	BURGESS & NIPLE LTD	17655	24230	37.242
150	39	PIQUA	GRANT BRUNDAGE BAKER	20480	24896	21.562
151	39	POND CREEK	BURGESS & NIPLE LTD	675	1133	67.852
152	39	UNION CITY	MOTE-BARRICK AND ASSOC., LTD	1716	2459	43.298
153	39	UNIONVILLE	KOHLI & KALLIEF ASSOC LTD	266	321	20.6767
154	39	VERMILION	HAVENS & EMERSON	11014	16116	46.3229
155	39	WELLSVILLE	W E QUICKSALL & ASSOC INC	5095	6024	18.4298
156	39	WEST MANSFIELD	BURGESS & NIPLE LTD	720	803	11.5278
157	39	WESTON	L H POSSEMEIER P E	1708	1778	4.0984
158	39	WOODVILLE	ENGINEERS ASSOCIATED	1435	2512	75.4704

TABLE B-6

PLACE ANALYSIS FOR WISCONSIN:
PERCENT DIFFERENCE BETWEEN ACTUAL
AND PROJECTED 1980 POPULATION

OBS	STATE	AREANAME	CONSULT	7111	PROJ80	PERDIF
159	55	BANGOR	DAVY ENGINEERING CO	1012	988	-2.372
160	55	BRILLION	MCMAHON ASSOC INC	2907	2673	-8.050
161	55	CAMBRIA	MID-STATES ASSOC	673	1403	109.212
162	55	CASHTON	ETC & ASSOC	846	894	5.674
163	55	CHIPPEWA FALLS	SHORT, ELLIOTT, & HENDRICKSON IN	12263	13803	12.558
164	55	COLEMAN	FOTH & VAN DYKE & ASSOC	896	1187	32.478
165	55	CRANDON	DONOHUE & ASSOCIATES	1969	1822	-7.466
166	55	DICKEYVILLE	SHIVE-HATTERY & ASSOC	1156	1369	18.426
167	55	FREDERIC	R. A. SMITH & ASSOCS., INC.	1039	1100	5.871
168	55	GRAFTON	DONOHUE & ASSOCIATES	8381	11050	31.846
169	55	GREEN LAKE	ARTHUR & ASSOC INC	1208	4101	239.487
170	55	HUSTLER	VIERBICHER ASSOCIATES	183	165	-9.836
171	55	JOHNSON	GOULD ENGINEERING INC	.	1066	.
172	55	JUDA	GENERAL ENGINEERING CO	.	428	.
173	55	KIELER	DAVY ENGINEERING CO	.	475	.
174	55	LA CROSSE	JENSEN & JOHNSON INC	48347	65500	35.479
175	55	LAKE MILLS	LAKELAND ENGRS INC	3670	4909	33.760
176	55	LENA	FOTH & VAN DYKE & ASSOC	591	624	5.584
177	55	LODI	MID-STATES ASSOC	1959	2172	10.873
178	55	LUCK	R G COOPER & ASSOC	997	901	-9.629
179	55	MENASHA	FOTH & VAN DYKE & ASSOC	1205	1388	15.187
180	55	MAPLEWOOD	GENERAL ENGINEERING CO	.	146	.
181	55	MARION	SHORT, ELLIOTT, & HENDRICKSON IN	1348	1236	-8.309
182	55	MARKESAN	RICE & ORTH INC	1446	1456	0.692
183	55	MILAN	BECHER & HOPPE ENGINEERS INC	.	266	.
184	55	MONROE	DONOHUE & ASSOC INC	10027	10000	-0.269
185	55	MONTICELLO	BUERKERT & MIELKE INC	4014	3109	-22.546
186	55	ONTARIO	OWEN AYRES & ASSOC	398	425	6.784
187	55	PARDEEVILLE	GENERAL ENGINEERING CO	1594	1738	9.034
188	55	PLATTEVILLE	DONOHUE & ASSOCIATES	9580	9394	-1.942
189	55	POYNETTE	LAKELAND ENGRS INC	1447	1409	-2.626
190	55	SIREN	MR WARREN WHITE	880	863	-1.932
191	55	STOCKBRIDGE	MCMAHON ASSOC INC	567	630	11.111
192	55	STODDARD	LA CROSSE ENGEERING AND	767	927	20.860
193	55	STURTEVANT	JENSEN & JOHNSON INC	4130	16225	292.857
194	55	VIROQUA	DAVY ENGINEERING CO	3716	3670	-1.238
195	55	WHITEWATER	R. A. SMITH & ASSOCS., INC.	11520	18815	63.359
196	55	WINTER	WATERFY ENGINEERING	367	366	-0.272
197	55	WONEWOC	OWEN AYRES & ASSOC	824	847	2.791

Note: No matching place in census data for Nos. 171, 172, 173, 180, and 183.

TABLE B-7

COMPARISON OF THE CENSUS BUREAU'S 1975 MIDDLE SERIES
ESTIMATES WITH THE ACTUAL 1980 COUNTS FOR REGION V STATES
AND THE NATION AS A WHOLE
(in thousands)

State	1970 Actual Counts	1975 Pro-jections	1980 Pro-jections	1980 Census Figures	% of Projection Error from 1980 Census Figures
Illinois	11,113	11,198	11,259	11,427	1%
Indiana	5,196	5,313	5,359	5,490	2%
Ohio	10,657	10,735	10,738	10,798	1%
Michigan	8,882	9,111	9,275	9,262	0%
Minnesota	3,806	3,921	4,025	4,076	1%
Wisconsin	4,418	4,589	4,752	4,706	1%
U.S.	203,306	213,032	221,651	226,549	2%

Source: Census Bureau's 1975 Middle Series estimated and 1980 census characteristics of the population.

TABLE B-8

OCCUPANCY STATUS OF YEAR-ROUND HOUSING UNITS
FOR AREAS AND PLACES SELECTED IN THE STUDY

Area		Area		Place	
		Mean	Sum	Min.	Max.
Region	Total Units	4,796	911,328	19	283,156
	Occupied	4,446	844,773	19	260,107
	Vacant	350	66,555	0	23,049
Illinois	Total Units	833	24,989	87	4,243
	Occupied	779	23,361	78	3,974
	Vacant	54	1,628	3	269
Indiana	Total Units	12,512	400,379	182	283,156
	Occupied	11,578	370,458	165	260,107
	Vacant	934	29,881	7	23,049
Michigan	Total Units	1,842	49,735	141	15,937
	Occupied	1,739	46,957	126	15,005
	Vacant	103	2,778	0	932
Minnesota	Total Units	607	21,866	19	7,011
	Occupied	575	20,709	19	6,746
	Vacant	32	1,151	0	265
Ohio	Total Units	11,655	361,305	81	239,433
	Occupied	10,723	332,401	78	218,297
	Vacant	932	28,904	3	21,136
Wisconsin	Total Units	1,560	53,060	62	18,728
	Occupied	1,495	50,847	62	18,085
	Vacant	65	2,213	0	643

TABLE B-9

SOURCE OF WATER FOR YEAR-ROUND HOUSING UNITS

Area		Area		Place	
		Mean	Sum	Min.	Max.
Region	Public system or private co.	4,569.62	868,227	0	251,524
	Individual well drilled	205.82	39,105	0	29,261
	Individual well dug	18.62	3,537	0	2,261
	Some other source	2.42	459	0	110
Illinois	Public system or private co.	820.43	24,613	62	4,212
	Individual well drilled	6.3	189	0	52
	Individual well dug	4.87	146	0	32
	Some other source	1.37	41	0	9
Indiana	Public system or private co.	11,400.06	364,802	3	251,524
	Individual well drilled	1,026.03	32,833	0	29,261
	Individual well dug	79.38	2,540	0	2,261
	Some other source	6.38	204	0	110
Michigan	Public system or private co.	1,737.22	46,905	11	15,832
	Individual well drilled	97.63	2,636	0	1,060
	Individual well dug	6.63	179	0	92
	Some other source	0.55	15	0	10
Minnesota	Public system or private co.	562.28	20,242	0	6,903
	Individual well drilled	35.08	1,263	0	279
	Individual well dug	9.30	335	0	100
	Some other source	0.55	20	0	8
Ohio	Public system or private co.	11,602.23	359,669	2	239,397
	Individual well drilled	38.52	1,194	0	356
	Individual well dug	8.94	277	0	139
	Some other source	5.32	165	0	82
Wisconsin	Public system or private co.	1,529.29	51,996	6	18,602
	Individual well drilled	29.12	990	0	172
	Individual well dug	1.76	60	0	15
	Some other source	0.41	14	0	2

TABLE B-10

SEWAGE DISPOSAL FOR YEAR-ROUND HOUSING UNITS

Area		Area		Place	
Area		Mean	Sum	Min.	Max.
Region	Public sewer	4,474.24	850,106	0	242,909
	Septic tank or cesspool	307.37	58,400	0	39,374
	Some other means	14.85	2.822	0	873
Illinois	Public sewer	735.77	22,073	0	4,086
	Septic tank or cesspool	92.33	2,770	0	386
	Some other means	4.87	146	0	16
Indiana	Public sewer	11,085.86	354,738	10	242,909
	Septic tank or cesspool	1,388.38	44,428	2	39,374
	Some other means	37.91	1,213	0	873
Michigan	Public sewer	1,709.78	46,164	3	15,757
	Septic tank or cesspool	129.37	3,385	4	984
	Some other means	6.89	186	0	94
Minnesota	Public sewer	566.22	20,384	3	6,921
	Septic tank or cesspool	37.42	1,347	0	135
	Some other means	3.58	129	0	18
Ohio	Public sewer	11,446.45	394,840	6	238,356
	Septic tank or cesspool	175.32	5,435	0	1,347
	Some other means	33.22	1,030	0	129
Wisconsin	Public sewer	1,526.68	51,907	6	18,648
	Septic tank or cesspool	30.44	1,035	0	172
	Some other means	3.47	118	0	29

APPENDIX C

DATA BASE FOR PROTOTYPE REPORT
IMPACTS ON LAND USE PLANS

PROJECTS OVER $3K COMPLETED, LISTED BY CITY NAME (LAND USE)

AP ST	APPLCNT CITY	NEEDS NUMBER	APPLCNT NAME	GRANT NUMBER	SQ NO	S Z	TOTFLW DESIGN	WWT TYP	L S	M O	N S
IL	LIBERTYVILLE	170705001	LAKE COUNTY DPW	171567	02	3	000600	ICT	750916	A 770901	A 820102
IL	ALTON	170273001	ALTON CITY OF	171132	01	3	001050	ICT	730630	A 740115	A 780103
IL	AURORA	170654001	AURORA SD	171407	03	3	003200	ICT	730929	A 790522	A4340224 —
IL	BELLEVILLE	170354002	BELLEVILLE CITY OF	171025	01	3	003445	ICT	730630	A 731129	A 770510
IL	BLOOMINGTON	170512001	BLOOMINGTON & NORMAL SD	171006	02	3	001600	ICT	760227	A 760723	A 801228
IL	CARPENTERSVILLE	170646001	CARPENTERSVILLE VILL OF	171412	02	3	000500	ICT	760113	A 760520	A 781128 —
IL	CHICAGO	170721001	MSD OF CHICAGO	175010	01	3	120000	ICT	730630	A 730402	A 800721
IL	CHICAGO	170721009	MSD OF CHICAGO	175053	01	3	044600	INC	730630	A 730403	A 800108
IL	CHICAGO	170212001	MSD OF CHICAGO	175255	01	3	001200	ICT	750529	A 760205	A 800801
IL	CHICAGO	— 170721009	MSD OF CHICAGO	175213	01	3	044600	ICT	750610	A 760209	A 801201
IL	CHICAGO	— 170212001	MSD OF CHICAGO	175077	01	3	001200	ICT	750611	A 760109	A 811013
IL	CHICAGO	170721006	MSD OF CHICAGO	175111	01	3	037200	NEW	750623	A 760520	A 820612
IL	CHICAGO	— 170721001	MSD OF CHICAGO	175142	03	3	013600	ICT	810213	A 811106	J 870108
IL	CHICAGO	— 170721001	MSD OF CHICAGO	175142	07	3	035600	ICT	810331	A 811022	J 841224
IL	CHICAGO HEIGHTS	170537001	THORN CREEK BASIN SD	171420	02	3	001210	ICT	750630	A 751208	A 800429
IL	DEKALB	170165001	DEKALB SD	171334	03	3	003725	ICT	740719	A 790329	A 811117 —
IL	EAST MOLINE		EAST MOLINE CITY OF	171332	01	4	001110	INC	730630	A 731119	A 780130
IL	EDGEWOOD	176595002	EDGEWOOD VILLAGE OF	171916	02	4	000615	NEW	830612	A 820513	A 831201
IL	ELGIN	170643001	ELGIN SD	171172	01	3	001700	ICT	740625	A 741212	A 771015
IL	GLEN ELLYN	170715001	GLEN ELLYN VILLAGE	171694	05	3	001710	ICT	770930	A 730512	A 811229 —
IL	GRANITE CITY	170277001	GRANITE CITY CITY OF	171215	01	3	002300	ICT	730630	A 730803	A 760411
IL	HINSDALE	170712001	HINSDALE SD	171397	01	3	001200	ICT	730630	A 740711	A 780628
IL	MOLINE	170334001	MOLINE CITY OF	171113	01	3	300550	ICT	750929	A 760409	A 780715 —
IL	MOLINE	170334002	MOLINE CITY OF	171924	02	3	000900	INC	810930	A 820604	J 840930
IL	ROCKFORD	170347001	ROCKFORD SD	171436	01	3	007400	ICT	740627	A 741022	A 780119
IL	ROCKFORD	— 170347001	ROCKFORD SD	171436	04	3	007400	ICT	760512	A 770509	A 810905
IL	SAUGET	170255001	SAUGET VILLAGE OF	171443	04	3	002630	NEW	810630	A 821230	J 860122 —
IL	SPRINGFIELD	170432001	SPRINGFIELD SD	171307	05	3	003370	ICT	770923	A 730131	A 810128 —
IL	ST CHARLES		ST CHARLES CITY OF	171133	01	4	000600	ICT	730630	A 730425	A 760901
IL	URBANA	170110002	URBANA CHAMPAIGN SD	171563	03	3	002320	ICT	770930	A 730519	A 821015 —
IL	VILLA PARK	170157001	SALT CREEK SD	171329	01	3	000500	ICT	750529	A 750322	A 800430
IN	ANDERSON	180720001	ANDERSON CITY OF	180517	01	3	002700	ICT	740629	A 750114	A 810512
IN	BLOOMINGTON	180200003	BLOOMINGTON CITY OF	180560	03	3	001500	NEW	770331	A 780608	A 821021 —
IN	CARMEL	180315002	CARMEL CITY OF	180625	07	3	003600	INC	810921	A 821011	TD840630 —
IN	COLUMBUS	180330001	COLUMBUS CITY OF	180760	01	3	001240	ICT	750630	A 760612	A 821019
IN	FORT WAYNE	180225001	FORT WAYNE CITY OF	180533	01	3	006000	ICT	740627	A 740903	A 831020
IN	GARY SD	180135001	GARY SD	180343	01	3	006300	ICT	760623	A 770322	T7340930
IN	GARY SD	— 180135001	GARY SD	180343	04	3	006000	ICT	770926	A 790503	TV340930
IN	GAS CITY	180455001	GAS CITY CITY OF	180373	03	3	023000	ICT	830909	A 810427	A 830603 —
IN	HAMMOND	180135001	HAMMOND SD	180617	01	3	034900	ICT	740629	A 750731	A 810425
IN	HUNTINGTON	180240001	HUNTINGTON CITY OF	180376	03	3	000500	ICT	770930	A 780410	A 820520 —
IN	INDIANAPOLIS	180361002	INDIANAPOLIS CITY OF	180365	01	3	012500	ICT	750630	A 760209	A 830720
IN	INDIANAPOLIS	180361001	INDIANAPOLIS CITY OF	180747	02	3	012000	ICT	750724	A 770523	A 830720 —
IN	INDIANAPOLIS	— 180361001	INDIANAPOLIS CITY OF	180747	04	3	012000	ICT	770630	A 780301	TZ340630
IN	INDIANAPOLIS	— 180361002	INDIANAPOLIS CITY OF	180365	03	3	012500	ICT	770630	A 780301	A 840111
IN	INDIANAPOLIS	— 180361001	INDIANAPOLIS CITY OF	180747	05	3	012000	ICT	770725	A 790122	T 840630
IN	INDIANAPOLIS	— 180361002	INDIANAPOLIS CITY OF	180365	04	3	012500	ICT	770315	A 790116	T 840630
IN	INDIANAPOLIS	— 180361001	INDIANAPOLIS CITY OF	180747	06	3	012000	ICT	770927	A 790122	TZ850131
IN	INDIANAPOLIS	— 180361002	INDIANAPOLIS CITY OF	180365	05	3	012500	ICT	780719	A 790122	TD840630
IN	LOGANSPORT	180120001	LOGANSPORT CITY OF	180295	01	3	000900	ICT	750625	A 760930	A 830223
IN	MUNCIE		MUNCIE CITY OF	180532	02	3	002400	ICT	750630	A 760401	A 810612

PROJECTS OVER $3K COMPLETED, LISTED BY CITY NAME (LAND USE)

AP ST	APPLICNT CITY	NEEDS NUMBER	APPLICNT NAME	GRANT NUMBER	SQ NO	B Z	TOTFLW DESIGN	WWT TYP	L S	M O	N S
IN	NEW CASTLE	182260001	NEW CASTLE CITY OF	180490	02	3	000900	ICT	760331	A 770414	A 810628-
MI	ADRIAN	262015001	LENAWEE CO DRAIN COMM	262449	04	3	000700	ICT	770330	A 780501	A 820519
MI	ANN ARBOR	260730001	WASHTENAW COUNTY OF	262539	04	3	002949	ICT	770722	A 771217	A 810718
MI	ANN ARBOR	260730001	WASHTENAW COUNTY OF	262539	05	3	002913	ICT	770730	A 780803	A 831220
MI	BATTLE CREEK	262007001	BATTLE CREEK CITY OF	263223	02	3	002353	ICT	730119	A 780601	A 801222
MI	BATTLE CREEK	262007001	BATTLE CREEK CITY OF	263223	05	3	002700	ICT	820930	A 830515	T 850431
MI	BAY CITY	261319001	BAY COUNTY OF	263213	02	3	001060	NEW	771210	A 780907	T 840630
MI	DETROIT	260596001	DETROIT CITY OF	262076	01	4	105000	ICT	730629	A 740523	A 800915
MI	DETROIT	260596001	DETROIT CITY OF	262300	02	3	032500	INC	750609	A 750519	A 791220
MI	DETROIT	260596001	DETROIT CITY OF	262300	03	3	105000	INC	750625	A 750827	A 801104
MI	DETROIT	260596001	DETROIT CITY OF	262300	04	3	032500	INC	730210	A 731115	A 821101
MI	DETROIT	260596001	DETROIT CITY OF	262300	17	3	032500	ICT	790316	A 731129	T 840630
MI	DETROIT	260596001	DETROIT CITY OF	262920	07	3	000825	ICT	790410	A 800114	T 850328
MI	DETROIT	260596001	DETROIT CITY OF	262920	23	3	000825	INC	791130	A 800602	A 801228
MI	DETROIT	260596001	DETROIT CITY OF	262920	31	3	000825	INC	791226	A 791226	A 811020
MI	DETROIT	260596001	DETROIT CITY OF	262920	56	3	060000	INC	800515	A 800909	A 811005
MI	DETROIT	260596001	DETROIT CITY OF	262920	45	3	080500	INC	801213	A 790716	A 810219
MI	DETROIT	260596001	DETROIT CITY OF	262920	62	3	001050	ICT	810127	A1820831	A1820831
MI	DETROIT	260596001	DETROIT CITY OF	262920	65	3	001050	ICT	810206	A 810914	A 830630
MI	DETROIT	260596001	DETROIT CITY OF	262920	53	3	001050	ICT	810331	A1820831	A1820831
MI	DETROIT	260596001	DETROIT CITY OF	262920	60	3	001050	ICT	810331	A 830330	T 841024
MI	DETROIT	260596001	DETROIT, CITY OF	263482	27	3	080500	INC	820325	A 820805	A 830728
MI	DETROIT	260596001	DETROIT, CITY OF	263482	05	3	080500	INC	820519	A 820927	A 831019
MI	DETROIT	260596001	DETROIT, CITY OF	263481	03	3	080500	INC	830105	A 830105	T 850731
MI	DETROIT	260596001	DETROIT	263482	22	3	080500	INC	830331	A 830830	T 840825
MI	FLINT	260411001	FLINT CITY OF	262127	01	3	005000	ICT	730630	A 740501	A 820701
MI	GRAND HAVEN	260346001	OTTAWA COUNTY ROAD COM	263256	01	3	000950	ICT	740102	A 790111	A 810901
MI	GRAND RAPIDS	260313001	GRAND RAPIDS CITY OF	262654	03	3	006000	INC	730111	A 730513	A 820130-
MI	[illegible]	262014001	MARQUETTE COUNTY OF	263279	01	3	000620	ICT	730112	A 730623	A 810520-
MI	JACKSON	261123001	JACKSON COUNTY OF	262625	05	3	001200	ICT	730111	A 730726	A 821215
MI	KALAMAZOO	260133001	KALAMAZOO CITY OF	262583	03	3	035530	ICT	730210	A 730722	A 800305-
MI	KALAMAZOO	260133001	KALAMAZOO CITY OF	262583	39	3	035530	ICT	791213	A 811027	T7850731
MI	LANSING	260032001	LANSING CITY OF	262041	01	3	004050	ICT	730629	A 740530	A 831030
MI	LANSING	260032001	DELTA TWP.-EATON COUNTY	262746	03	3	000600	ICT	830927		T 870315-
MI	MONROE	260300001	MONROE COUNTY OF	262595	02	3	002010	ICT	760630	A 761104	A 790410-
MI	OWOSSO	262314001	OWOSSO CITY OF	262531	01	3	033530	ICT	750215	A 780701	T 850101
MI	PONTIAC	260556001	PONTIAC CITY OF	262220	01	3	002550	ICT	730629	A 740521	A 790801
MI	ST JOHNS	260327001	CLINTON COUNTY DR.	263351	01	3	000500	ICT	730131	A 730922	A 831206-
MI	YPSILANTI	260725001	WASHTENAW COUNTY OF	262539	06	3	002363	ICT	770330	A 830729	A 830715-
MN	ALBERT LEA	270003001	ALBERT LEA, CITY OF	270309	03	3	001250	NEW	790923	A 801020	A 830930
MN	CLEARWATER	270146001	CLEARWATER/CLEAR LAKE, CITIES OF	270832	02	3	140000	NEW	730919	A 770425	A 800529
MN	DULUTH	270032001	WESTERN LAKE SUPERIOR SD	270749	03	3	006360	NEW	750626	A 750912	A 811019
MN	MOORHEAD	270032001	MOORHEAD, CITY OF	270370	03	3	000600	NEW	790923	A 800407	A 811201
MN	MOORHEAD	270032001	MOORHEAD, CITY OF	270370	05	3	000600	NEW	800926	A 811431	A 831003-
MN	PINE RIVER	270220001	PINE RIVER AREA SANITARY	270990	02	4	000600	NEW	800205	A 820515	A 830705
MN	ROCHESTER	270245001	ROCHESTER, CITY OF	270436	03	3	001200	ICT	790923	A 800908	A 831222-
MN	ST CLOUD	270245001	SAINT CLOUD, CITY OF	270747	01	3	001500	NEW	730629	A 740228	A 771201-
MN	ST PAUL	270001001	MWCC - MWTP PRETREATMENT	270663	01	4	065500	ICT	730629	A 741022	A 830701
MN	ST PAUL	270001001	MWCC - MWTP PRIMARY TREATMENT	270664	01	4	020000	INC	730629	A 741024	A 790627
MN	ST PAUL	270001001	MWCC - MWTP EFFLUENT PUMPING	270662	02	3	065500	ICT	740524	A 741013	A 790120
MN	ST PAUL	270001001	MWCC - MWTP AERATION & FINAL TANKS	270665	02	3	027000	INC	741024	A 750313	A 800628

PROJECTS OVER 50% COMPLETED, LISTED BY CITY NAME (LAND USE)

AP ST	APPLCNT CITY	NEEDS NUMBER	APPLCNT NAME	GRANT NUMBER	SQ NO	S 7	TOTFLW DESIGN	WWT TYP	L S	M O	N S
MN	ST PAUL	270001001	MWCC - MWWTP AERATION & FINAL TANKS	270665	03	3	029000	NEW	760628	A 761004	A 800726
MN	ST PAUL	270001001	MWCC - EMPIRE	279050	02	3	000600	NEW	761230	A 770512	A 830616
MN	ST. PAUL	270001001	MWCC - MWWTP WAREHOUSE & MAINTENANCE	279093	01	3	029000	NEW	800717	A 810514	A 821228
MN	ST. PAUL	270001001	MWCC - MWWTP ADDITIONAL TREATMENT	279103	02	3	025000	ICT	820414	A 820810	T 841228
OH	AKRON	390034001	AKRON CITY OF	391255	01	3	010000	ICT	770620	A 780403	A 811231
OH	AKRON	390034001	AKRON CITY OF	391256	02	3	010000	ICT	770727	A 780329	A 811231
OH	AKRON	390034001	AKRON CITY OF	390934	03	3	009000	ICT	810924	A 820503	T 850401
OH	ALLIANCE	390124001	ALLIANCE CITY OF	390958	03	3	000750	ICT	810925	A 820419	T 841104
OH	BATAVIA	391600033	CLERMONT COUNTY	390567	02	3	000700	NEW	760528	A 770909	A 790701-
OH	CANTON	391323001	CANTON CITY OF	390622	01	3	003300	ICT	730629	A 741119	A 810704-
OH	CANTON	391323001	CANTON CITY OF	390996	03	3	004400	ICT	770931	A 780509	A 811015
OH	CLEVELAND	391666024	NORTHEAST OHIO REGIONAL SEWER DISTRICT	390551	02	3	035000	NEW	750512	A 770406	T 840930
OH	CLEVELAND	391666002	NORTHEAST OHIO REGIONAL SEWER DISTRICT	390741	02	3	020000	ICT	750609	A 751202	A 800928
OH	CLEVELAND	391666002	NORTHEAST OHIO REGIONAL SEWER DISTRICT	390741	05	3	020000	ICT	751231	A 770112	A 810227
OH	CLEVELAND	391666002	NORTHEAST OHIO REGIONAL SEWER DISTRICT	390741	06	3	020000	ICT	760330	A 760709	A 790807
OH	CLEVELAND	391666002	NORTHEAST OHIO REGIONAL SEWER DISTRICT	390741	10	3	020000	ICT	770131	A 770705	A 820801
OH	CLEVELAND	391666002	NORTHEAST OHIO REGIONAL SEWER DISTRICT	390741	12	3	020000	ICT	770331	A 770901	A 810630
OH	CLEVELAND	391666002	NORTHEAST OHIO REGIONAL SEWER DISTRICT	390741	13	3	020000	ICT	770429	A 771219	A 790622
OH	CLEVELAND	391666002	NORTHEAST OHIO REGIONAL SEWER DISTRICT	390741	14	3	020000	ICT	770921	A 790413	A 821129
OH	CLEVELAND	391666002	NORTHEAST OHIO REGIONAL SEWER DISTRICT	390741	16	3	025000	ICT	770923	A 780918	A 830315
OH	COLUMBUS	391792003	OHIO WATER DEVELOPMENT AUTHORITY	390683	01	3	000750	NEW	730623	A 740523	A 830915
OH	COLUMBUS	391792002	COLUMBUS CITY OF	390497	01	3	012000	ICT	770222	A 771220	A 830301
OH	DAYTON	395419037	MONTGOMERY COUNTY	390702	01	3	002000	NEW	750929	A 761124	A 791015
OH	FAIRFIELD	392623001	FAIRFIELD CITY OF	390686	01	3	000600	ICT	741211	A 741227	A 820901
OH	GALION	392919001	GALION CITY OF	391331	03	3	001000	ICT	920312	A 920706	T 850106
OH	HAMILTON	393357001	HAMILTON CITY OF	390654	01	3	002470	ICT	750306	A 750908	A 771030
OH	HOLLAND	394550001	LUCAS COUNTY	390797	02	3	001500	ICT	770923	A 780424	A 800501
OH	KENT	394025001	KENT CITY OF	391302	03	3	000500	ICT	910930	A 920729	T 841001-*
OH	LAKEWOOD	394243001	LAKEWOOD CITY OF	391134	03	3	001300	ICT	900930	A 920714	T 841014-*
OH	LIMA	394430001	LIMA CITY OF	393525	01	3	001350	ICT	730623	A 760311	A 810710
OH	MARION		MARION CITY OF	390637	01	3	001060	ICT	730623	A 740227	A 810630
OH	MASSILLON	394991001	MASSILLON CITY OF	390627	01	3	001250	ICT	730625	A 740109	A 780829
OH	MEDINA	395351003	MEDINA COUNTY	390999	02	3	001000	ICT	750530	A 751001	A 801215
OH	MEDINA	395351003	MEDINA COUNTY	390999	03	3	001000	ICT	760325	A 760621	A 801215
OH	MOUNT VERNON		MOUNT VERNON CITY OF	390593	01	3	000500	ICT	741213	A 741227	A 800910
OH	OREGON	396303002	OREGON CITY OF	390643	01	3	000300	NEW	750512	A 751113	A 810731-
OH	OREGON	396303001	OREGON CITY OF	390643	02	3	000310	NEW	830306	A 830729	A 810710
OH	PAINESVILLE	396378001	PAINESVILLE CITY OF	390555	01	3	000600	ICT	760213	A 760524	A 800701-
OH	SANDUSKY	397413001	SANDUSKY CITY OF	391117	02	3	001250	ICT	770531	A 780217	A 791121-
OH	STEUBENVILLE	397910001	STEUBENVILLE CITY OF	390957	01	3	000600	ICT	751231	A 770419	A 800512-
WI	ANTIGO	550160001	ANTIGO CITY OF	550770	03	3	000625	NEW	770823	A 780330	A 810902-
WI	APPLETON	550170001	APPLETON, CITY OF	550831	02	3	001650	NEW	751126	A 760426	A 811228
WI	APPLETON	550170001	APPLETON, CITY OF	550831	03	3	001650	ICT	760630	A 770301	A 811228
WI	DEPERE	551330001	DEPERE, CITY OF	550706	02	3	001420	NEW	750929	A 760415	A 810904-
WI	EAU CLAIRE	551470001	EAU CLAIRE, CITY OF	550623	03	3	001626	ICT	770921	A 790601	A 830630-
WI	FOND DU LAC	551730001	FOND DU LAC, CITY OF	550749	01	3	001110	ICT	741107	A 750319	A 811022
WI	KAUKAUNA	552370001	HEART OF THE VALLEY MSD	550821	03	3	000550	ICT	760916	A 760930	A 810909
WI	MILWAUKEE	552791001	MADISON MSD	550734	01	3	005700	ICT	740925	A 750433	A 790322
WI	SUPERIOR	554730001	SUPERIOR CITY OF	550543	01	3	000500	ICT	740425	A 740522	A 810604
WI	WEST BEND	555170001	WEST BEND, CITY OF	550711	03	3	000900	ICT	770825	A 780403	A 811228-

NUMBER OF RECORDS PRINTED = 152
IN TT2/152.001 AT LINE 0 + 1
DATABASE TT.2152.001 DOES NOT EXIST
152 RECORD(S) SORTED

100 Projects

Evaluation Form

1. Project Name. DEKALB, ILLINOIS
2. Needs(Facility) No. 170 P5010 NPDES No. ____
   Grant No. 173134
3. Date of Document: Year ____ Month ____ Day ____
4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☒
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: DEKALB, ILL
   ILLINOIS
   __-__-__N--__-__-__W __-__-__N--__-__-__W
   __-__-__N--__-__-__W __-__-__N--__-__-__W
   __-__-__N--__-__-__W __-__-__N--__-__-__W
6. Issue: SOCIO/ECON Parameter: LAND USE PLAN
7. Type of Impact: 1 (1=Quantitative) (2=Qualitative)
8. Prediction:
   NO AGRICULTURAL LAND WILL BE USED BY
   THE PROJECT
9. Source of NEPA Document Data: EA
10. Baseline Conditions: Year 1970
    COMPREHENSIVE PLAN
11. Predicted for end of planning period: Year ____
    NO IMPACT

12. Predicted for current year: Year 1984

NO IMPACT

13. Actual current conditions:

NO IMPACT

14. Data Base: 1970 COMPREHENSIVE PLAN

15. Summary: (Code 00)

NO CHANGES IN LAND USE PLAN

16. Regulations in Effect:

A.Baseline:

Today:

B.Baseline:

Today:

C.Baseline:

Today:

17. Reviewer: HJH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

Environmental Assessment

Sewer Rehabilitation Project: DeKalb S.D.
C171334-04

A. DeKalb Sanitary District
303 Hollister Avenue
DeKalb, Illinois 60115
DeKalb County

B. Project Description:

1. Abandon Northland Plaza STP and provide gravity sewer to Sycamore Road trunk sewer when the plant reaches its design loading at some future date.

2. Relief Sewer Construction:

a. Woodley/Thornbrook Sewer

1) 610 feet of 8 inch sanitary sewer
2) 400 feet of 18 inch sanitary sewer
3) 4 manholes

b. Dodge Addition Sewer

1) 2,665 feet of 15 inch sanitary sewer
2) 700 feet of 10 inch sanitary sewer
3) 14 manholes

c. 13th Street Sewer

1) 1,750 feet of 8 inch sanitary sewer
2) 7 manholes

d. 10th Street Pump Station Abandonment

1) 2,100 feet of 15 inch sanitary sewer
2) 175 feet of 10 inch sanitary sewer
3) 8 manholes

e. Plant Influent Revisions

1) 75 feet of 24 inch sanitary sewer
2) Plug bypass to river

f. 1st & Sycamore Sewer

1) 800 feet of 24 inch sanitary sewer
2) 4 manholes
3) Repair Gunite 5 manholes

B. Short term problems of traffic control and rerouting and increased noise, dust, and erosion will be experienced during the construction phase of the project. These effects can be minimized by the use of good erosion control practices and setting up detours around the construction sites. The internal sewer repair work will not significantly hinder the continuation of normal daily activities.

C. This project will not effect any known Archaeological, Historical or valuable natural resources. The work is confined to the already developed areas of the City.

D. No impact on the areas endangered species of flora or fauna will result.

E. No land currently used for agricultural purposes (Prime Agricultural land) will be used up by the project.

F. The population projection data used in developing the necessary plant size was in agreement with the data source used to develop the Statewide Implementation Plan for Air Quality.

G. No Corps of Engineer permits are required for this project.

The Illinois Environmental Protection Agency contact person for this Project is:

Richard A. Schultz, Project Manager
Grant Administration Section
Division of Water Pollution Control

Evaluation Form

1. Project Name. MOLINE CITY OF

2. Needs(Facility) No. 170338001 NPDES No.

Grant No. 171118

3. Date of Document: Year 1978 Month 01 Day 06

4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☒

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: MOLINE FAC

ILITIES PLANNING AREA ALLINOIS

__-__-__N--__-__-__W __-__-__N--__-__-__W

__-__-__N--__-__-__W __-__-__N--__-__-__W

__-__-__N--__-__-__W __-__-__N--__-__-__W

6. Issue: SOCIO/ECON Parameter: LAND USE PLAN

7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)

8. Prediction:

POSSIBLE DEVELOPMENT ALONG PROPOSED SYSTEM AND POSSIBLE EXTENSION TO NDEVELOPED AREAS. INCREASED POPULATION DENSITY PERMITTED

9. Source of NEPA Document Data: FNSI

10. Baseline Conditions: Year 1972

COMPREHENSIVE PLAN

11. Predicted for end of planning period: Year

POSSIBLE INCREASED DEVELOPMENT

12. Predicted for current year: Year 1984

13. Actual current conditions:

LITTLE NEW DEVELOPMENT

14. Data Base:

15. Summary: (Code 00)

LITTLE IMPACT - ESSENTIALLY NO NEW DEVELOPMENT

16. Regulations in Effect:

A.Baseline: COMPREHENSIVE PLAN

Today: SAME

B.Baseline:

Today:

C.Baseline:

Today:

17. Reviewer: HJH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

JAN 6 1978

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: (City/County/State) City of Moline, Rock Island County, Illinois

Planning Area: Moline Facilities Planning Area, Rock River Valley Regional Facilities Plan

Proposed Project(s): The project consists of the preparation of plans and specifications for enlargement of the Moline South Slope Treatment Plant along with necessary interceptors to serve as a regional facility.

Estimated Project Cost: $6,735,381

Potential Agency Financial Share: $5,051,536

The review process has shown that significant environmental impacts which would warrant preparation of an EIS will not result from the proposed action. Any significant adverse impacts have either been eliminated by making changes in the project or resolved through mitigative measures. Consequently, a preliminary decision not to prepare an EIS has been made. This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Michael W. MacMullen

for Kent Fuller
Chief, Planning Branch

G. Number of stream crossings, if any: 2--The applicant will apply for the Army Corps of Engineers "404" permit(s) during the Step 2 process.

3. Nature and Extent of Land Use Changes

A. Primary

1) Site: Only a small amount of additional land will be required for the necessary treatment plant expansion. Enlarging one existing plant will offer increased dependability since it will be replacing several existing overloaded or substandard treatment plants. Many individual treatment units such as septic tanks, discharges to tiles, and lagoons will be eliminated. The largest amount of land will be utilized for the stormwater retention facilities. The stormwater retention lagoon will be constructed adjacent to the treatment facility and will serve as a buffer between the wastewater treatment facility and adjacent residential areas. The proposed acquisition of additional land by the City of Moline will require the relocation of some families. However, compensation should be received by those being relocated. The relocation is expected to be completed long before any construction has started. Most land is vacant. About one or two acres additional acres will be needed for the storage lagoon.

2) Sewer Routes: Alternate locations for the interceptor routes were considered during the layout of the lines. Where possible, sewers were designed in street rights-of-way; however, due to topography, this was not always possible. The construction of the interceptor sewers is planned to be entirely underground. There is no known geological formations that will be affected as a result of construction. All approaches to stream banks will be rip rapped to reduce erosion. This will impact some streambank vegatation. Excavating and backfilling of the trenches will cause temporary land use disruptions. Some rock excavation utilizing explosives will be necessary.

B. Secondary: New sewers in this area of rapid growth will induce development. The sewage treatment plant will offer sufficient capacity to support planned development through 1995. Offering sewer services to presently undeveloped areas will have the affect of increasing the density of people moving into a new area. This will offer a wider range of housing alternatives (such as apartment buildings), than if the the land was allowed to develop through the use of individual disposal systems. Increased secondary impacts due to storm runoff can be anticipated.

The main purpose of the proposed sewer system improvements is to provide service to developed areas which currently do not have adequate treatment facilities and to extend interceptor sewer capacity to areas that are planned to develop in the next fifty years. A secondary effect resulting from this construction will

be the possible development along and adjacent to the proposed sewer system and the possibility of extensions into areas not currently developed. Current zoning and development plans were taken into consideration when extending the sewer lines into presently undeveloped regions of the facilities planning area. Where sewers pass through private property, easements will have to be obtained.

Increased densities of development in an area that is largely open space with sufficient water supply could possibly have an adverse impact on fish and wildlife. Increased land cover with an impervious surface can cause streams to dry up during the summer and flood during wet seasons.

4. Major Primary and Secondary Impacts of the Project
A. Primary/Construction-Related: Efforts will be made to minimize the impact to traffic patterns during construction. The small amount of interceptor construction which wil require the clearing of vegatation in wooded areas will be restricted to the minimum amount necessary for construction.

Some wash of silty materials could raise the turbidity of nearby streams during construction. This includes the Rock River Crossing and the crossing of a small creek by the Division F interceptor. The applicant will apply for Army Corps of Engineer dredge and fill (404) permits for these crossings. It is anticipaed that detailed plans to mitigate any adverse environmental effects will take place during this permit process. In other areas, soil erosion will be held to a minimum by limiting the amount of open excavation to where installation of the interceptor is taking place and then quickly restoring surface contours and covers. Some sewers will be constructed in areas of heavy use, such as commercial or residential areas. Complaints from residents during construction will be quickly responded to

The construction of this proposed project should have an overall beneficial effect on the aquatic and wildlife of the area. The streams in the area in which aquatic life live and from which terrestial wildlife of the area drink will be made cleaner and safer. Some disruption of the aquatic life and the wildlife during construction is unavoidable. However, the long term benefits should be much greater than the short term disruption that occurs.

B. Secondary: The service area is anticipated to receive rapid growth during the planning period. This project could cause a change in the density or distribution of this growth. Proper planning and enforcement of zoning ordinances must take place to ensure orderly development of the area. This project will place a moderate economic burden on existing residents to fund capacity for future development. The need for additional schools and other public services will accompany this development.

Evaluation Form

1. Project Name. SPRINGFIELD/ELINOIS
2. Needs(Facility) No. 170402001 NPDES No. ____
   Grant No. 17180 7
3. Date of Document: Year ____ Month ____ Day ____
4. Type of Document: a. EIS ____ b. EA ____ c. EID ____ d. Facilities Plan ____ e. Negative Dec. ____ f. FNSI X
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: ALLINOIS

   ____-____-____N--____-____-____W ____-____-____N--____-____-____W
   ____-____-____N--____-____-____W ____-____-____N--____-____-____W
   ____-____-____N--____-____-____W ____-____-____N--____-____-____W

6. Issue: SOCIO/ECON Parameter: LAND USE PLAN
7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)
8. Prediction:

   MINIMAL

9. Source of NEPA Document Data: FMS/
10. Baseline Conditions: Year 1974

    COMPREHENSIVE PLAN

11. Predicted for end of planning period: Year ____

    MINIMAL

12. Predicted for current year: Year 1984

MINIMAL

13. Actual current conditions:

NO IMPACT

14. Data Base: 1972 COMPREHENSIVE PLAN

15. Summary: (Code 00)

NO IMPACT - LITTLE NEW DEVELOPMENT CHANGES IN LAND USE PLAN

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HJH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

Environmental Assessment

Project Identification:

Springfield Sanitary District - Sugar Creek - Lake Springfield Sub-Facilities Planning Area

Springfield Sanitary District
3017 North 8th Street
Rural Route # 2
Springfield, Illinois 62706

Project Description:

The proposed project consists of 12,605 lineal feet of gravity interceptor sewer, 5,000 lineal feet of 6 " diameter forcemain and one .16 MGD pumping station, all located immediately south of Lake Springfield and west of Interstate Highway 55. The interceptor system will discharge to the recently completed Chatham East Pumping Station, which is in turn tributary to the Springfield Sanitary District Spring Creek Treatment Plant.

The interceptor project is intended to eliminate two small treatment facilities currently discharging directly to Lake Springfield, a public water supply reservoir and major recreational lake. The two treatment plants serve the Illinois State Policy Academy and the Chatham Glenwood High School. Neither of these plants currently meet Illinois effluent limitations for discharges to lakes.

The interceptor system will also provide sewer service to the Lake Knolls area, an older subdivision development west of I-55 with a long history of problems with malfunctioning on-site disposal systems. As a condition to this grant funded project, the Springfield Sanitary District will construct a sanitary collection system in this area.

The provision of these interceptors is actually the final extension of the Westside Interceptor system previously funded as a result of facilities planning in the Spring Creek Sub-FPA (also under C171807). This interceptor work removed Chatham as a major point source from Lake Springfield. The project proposed will remove the two remaining domestic discharges to the lake, while provision of sewers in the Lake Knolls area will eliminate a prominent non-point source of domestic contamination.

The scope and routing of the proposed interceptor system has been changed several times in the course of facilities planning, as reflected in the several addendums to the facilities plan. The system finally shown in the Fifth Addendum represents a much less ambitious project than that originally proposed. As originally proposed, the interceptor project would have also extended eastward to serve the Ball Elementary School and proposed developments south of the lake. This subsequently eliminated from the project because of the lack of need in this area and the undesirable secondary impact of extensive interceptor construction through undeveloped agricultural land.

Aside from protecting the Lake, the project enables the construction of collector sewers in Lake Knolls, where residents have for many years experienced serious problems with on-site systems. The project will eliminate the ponding of septic tank effluent in yards and ditches. The extent of the problem in the Lake Knolls area is demonstrated by the considerable citizen response in favor of this project at public meetings and hearings held during the planning process, and their expressed desire to both enter the Springfield Sanitary District and pay the cost for collector sewers without grant assistance.

No unusual mitigative measures are necessary for erosion or sediment control. Most construction will occur along grassy road right of way that will tend to inhibit movement of sediment. The principle source of sediment will be backfill temporarily stored alongside an open sewer trench. When in the proximity of the lake or its tributaries, contractors will be required to remove backfill to a point where it cannot errode to the body of water. Contractors will be required to clean up the construction site as work progresses. Sediment impact will be minimal.

It will be necessary to cross the Sugar Creek Branch of Lake Springfield at one point. The 128 feet overhead crossing of the waterway will be made on a three span sewer bridge parallel and north of the existing bridge carrying County Highway 40 over Sugar Creek. The midstream piers of the sewer bridge will be aligned with the midstream piers of the highway bridge, and the lowest elevation on the sewer bridge will be higher than the lowest elevation on the highway bridge. Consideration was given to tying the sewer to the existing highway bridge, but it was found to be structurally incapable of handling the additional dead weight. A permit for the sewer bridge will be obtained from the Illinois Division of Water Resources.

There will be no long-term impact on flora and fauna. The project routing is primarily through grassy area with a high capacity for recovery.

No particular impacts on employment are anticipated, except for the limited employment offered by the actual construction work. There are no historical, cultural or archaelogical sites of significance which would be impacted by the construction.

The proposed project neither passes through nor directly borders prime agricultural land. While there is agricultural land within the potential service area of the project, it lost much of its agricultural value with the construction of I-55 and associated interchanges and service roads, and is currently developing to residential and commercial uses.

As noted earlier, the project has been considerably modified as a result of State participation. The scope, sizing, and routing have all been altered to tailor the project to current identified needs and minimize impacts on future development. No future modifications are anticipated.

Evaluation Form

1. Project Name. URBANA-CHAMPAIGN, ILLINOIS
2. Needs(Facility) No. 170112002 NPDES No. ____
   Grant No. 171568
3. Date of Document: Year 1976 Month 11 Day 23
4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. ___ f. FNSI X
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: ILLINOIS

   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W

6. Issue: SOCIO/ECON Parameter: LAND USE PLAN
7. Type of Impact: 2 (1= Quantitative) (2= Qualitative)
8. Prediction:

   NO CHANGES IN LAND USE

9. Source of NEPA Document Data: ____
10. Baseline Conditions: Year 1972

    COMPREHENSIVE PLAN

11. Predicted for end of planning period: Year ____

    NO LAND USE CHANGES

12. Predicted for current year: Year 1984

NO LAND USE CHANGES

13. Actual current conditions:

SIGNIFICANT LAND USE CHANGES

14. Data Base: 1982 COMPREHENSIVE PLAN

15. Summary: (Code 1)

RECOGNIZED NEED FOR MORE COMPACT URBAN DEVELOPMENT - SIGNIFICANT CHANGES IN LAND USE PLANS

16. Regulations in Effect:

A. Baseline: 1972 COMPREHENSIVE PLAN

Today: 1982 COMPREHENSIVE PLAN

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HJH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST
CHICAGO, ILLINOIS 60604

L U. changes - none

November 23, 1976

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements (EIS), and environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: Urbana-Champaign Sanitary District

Planning Area: Champaign-Urbana Facilities Planning Area

Proposed Project(s): Preparation of construction plans & specifications for the upgrading of existing Northeast and Southwest Sewage Treatment Plants to handle design average flow rates of 17.3 MGD and 5.9 MGD respectively and regional transmission facilities necessary to phase out the existing Village of Savoy and Willard Treatment Plants.

Estimated Project Cost: $29,734,955.00

Potential Agency Financial Share: $22,301,216.00

The review process has shown that significant environmental impacts which would warrant preparation of an EIS will not result from the proposed action. Any significant adverse impacts have been either eliminated by making changes in the project or resolved through mitigative measures. Consequently, a preliminary decision not to prepare an EIS has been made. This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Kent Fuller, Acting Chief
Planning Branch

Evaluation Form

1. Project Name. BLOOMINGTON/WOLANA
2. Needs(Facility) No. 1820200013 NPDES No. ____
   Grant No. 1A05600
3. Date of Document: Year 1982 Month 02 Day 12
4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. ___ f. FNSI X
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: INDIANA

   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W

6. Issue: SOC/ECON Parameter: LAND USE PLAN
7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)
8. Prediction:

   WILL NOT APPRECIABLY ALTER LAND USE PATTERNS IN THE AREA

9. Source of NEPA Document Data: ____
10. Baseline Conditions: Year ____

11. Predicted for end of planning period: Year ____

    NO IMPACT

12. Predicted for current year: Year 1984

NO IMPACT

13. Actual current conditions:

NO IMPACT

14. Data Base:

15. Summary: (Code 00)

NO IMPACT - NO COMPREHENSIVE PLAN COVERING UNINCORPORATED PORTIONS OF SERVICE AREA

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HJH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF

12 FEB 1982

FINDING OF NO SIGNIFICANT IMPACT

TO ALL INTERESTED CITIZENS, ORGANIZATIONS, AND GOVERNMENT AGENCIES:

Bloomington/Monroe/Indiana
(City/County/State)

C 180560 - 03
(EPA Project Number)

The purpose of this notice is to seek public input and comments on EPA's preliminary decision that an Environmental Impact Statement (EIS) is not required to implement the recommendations discussed in the attached Environmental Assessment of a wastewater facilities plan submitted by the municipality mentioned above.

How were environmental issues considered?

The National Environmental Policy Act (NEPA) requires all Federal agencies to include environmental factors in the decision-making process. EPA has done this by incorporating a detailed analysis of the environmental effects of the proposed alternatives in its review and approval process. An Environmental Information Document was prepared by the municipality, as part of the facilities plan, and was reviewed by the State. Our own review has found that the proposed project does not require the preparation of an EIS.

Why is an EIS not required?

Our environmental review concluded that significant environmental impacts will not result from the proposed action. Any adverse impacts have either been eliminated by changes in the facilities plan or will be reduced by the implementation of the mitigative measures discussed in the attached Environmental Assessment.

How do I get more information?

A map depicting the location of the proposed project is attached. The Environ-

mental Assessment, which is also included, presents additional information on the project, alternatives that were considered, impacts of the proposed action, and the basis for our decision. Further information can be obtained by calling or writing the contact listed in the Environmental Assessment.

How do I submit comments?

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at the letterhead address. We will not take any action on this facilities plan for 30 calendar days from the date of this notice in order to receive and consider any comments.

What happens next?

In the absence of substantive comments during this period, our preliminary decision will become final. The municipality will then be eligible to receive grant assistance from this Agency to design and/or construct the proposed project.

Any information you feel should be considered by EPA should be brought to our attention. Your interest in the NEPA process and the environment is appreciated.

Eugene I. Chaiken, Chief
Facilities Planning Branch

Attachments

ENVIRONMENTAL IMPACT APPRAISAL

A. Project Identification

City of Bloomington
City of Bloomington Utilities
P.O. Box 1216
Bloomington, Indiana 47402
Telephone No.: 812/339-2261

B. Project Description and Location (See Maps One and Two)

The project consists of construction of a sludge storage lagoon, 18 sludge drying beds, a sludge landfill, and a maintenance garage. The maintenance garage will be located on the existing Dillman Road Waste Water Treatment Plant (WWTP) site, which is just west of State Road 37 and south of Clear Creek. The sludge drying beds will be located just north of the Louisville and Nashville Railroad tracks, south of Clear Creek. The sludge storage lagoon and landfill will be located on an extension of the existing site, north of Clear Creek. A new access road and bridge will be constructed across Clear Creek. Approximately 12 acres of land will be used for the drying beds, 4 acres for sludge storage, and 7 acres for landfill.

Total cost of the proposed project is $5,808,050, which includes construction, contingencies, an allowance for inflation, land, sludge removal equipment, dump trucks, a front-end loader and a bulldozer. A breakdown of the total costs is as shown on Exhibit One attached.

It is estimated that the total project cost, with the exception of land for the storage lagoon, drying beds, and maintenance garage is eligible for a 75% Federal grant and a 10% State of Indiana grant. Remaining costs will be funded locally.

Design of the projected project is expected to be completed by August 1, 1982, with construction to commence shortly thereafter. Construction should be completed by October 1983.

The proposed project is critical to startup of the recently constructed 15 MGD advanced waste treatment plant, as ultimate sludge disposal facilities were not constructed concurrently. The new WWTP includes facilities for aerobic digestion and centrifuging of sludge but selection of ultimate disposal method was deferred in the environmental impact statement (EIS) filed for the WWTP construction, pending completion of a sludge management plan. For details associated with the plant construction, please refer to the final EIS dated August 1976 and distributed September 1, 1976, entitled "Sewage Treatment Facilities for the South Bloomington and Lake Monroe Service Areas, Bloomington, Indiana."

A range of sludge disposal alternatives was analyzed in the sludge management plan based on the approved construction of aerobic digestion, and certifugation facilities which could be operated in either a thickening (5% solids) or dewatering (14 - 16% solids) mode. The selected plan uses a thickening mode with dewatering taking place in the storage lagoon and on sludge drying beds. Part of the reasons for selection of landfilling as the ultimate disposal method was the existence of PCB's in the sludge, which made land application publicly unacceptable. Long-term lagooning of the sludge at a site near the confluence of Clear and Salt Creeks was both technically and environmentally unacceptable to the State and EPA.

Likewise, a maintenance building was not constructed concurrent with the WWTP, as sizing of the facility was dependent upon selection of ultimate disposal method for sludge. This building is necessary for storage of equipment and spare parts and for maintenance upkeep of vehicles.

C. Impact of the Project on the Environment

1. Primary Impacts

The major primary impacts of the proposed construction are those impacts associated with excavations in and adjacent to Clear Creek. Those impacts associated with revegetation, pipe crossings in stream beds (2), pipes laid parallel to stream beds, and channel relocation have been identified and mitigative measures recommended in Chapter 4, Task 11 of the Final EIS for the WWTP. As such, they will not be rediscussed here.

The site itself if relatively isolated, and already devoted to institutional and right-of-way uses, what with State Route 37, the Illinois Central Railway, the Louisville and Nashville Railroad, and the plant itself bounding the areas of construction. Visual impacts from State Route 37 will be screened by trees.

The proposed construction will also require that flood protection berms, with outside slopes riprapped, be constructed to an elevation of at least 1 foot above the 100 year flood elevation, which has been identified to be at elevation 623.2 feet at the downstream face of the Louisville and Nashville Railroad bridge by the Louisville District, Corps of Engineers. It is doubtful that this construction will impact 100 year flood elevations upstream since flow is restricted by this bridge. A permit for construction in a floodway will be required from the Indiana Department of Natural Resources. Construction of the landfill portion will also require a construction and operating permit from the Environmental Management Board of the Indiana State Board of Health. A copy of Engineers Section 404 stream crossing permit may also be required.

Impact on archeological resoures is not expected, as an archeological survey of the plant site in 1976 uncovered no artifacts. If anything is unearthed during construction, work will be stopped and the Indiana Department of Natural Resources notified.

Both long and short term employment is expected as a result of the construction and operation of the facilities.

2. Secondary Impacts
There may be some adverse secondary impacts on air quality in the vicinity of the plant due to both increased truck and heavy equipment operation, and possibly a slight musty odor from the stored sludge. This impact is unavoidable.

The land from the drying beds and storage lagoon will be devoted to institutional use for the life of the plant. The landfill may be converted to other use after a number of years if PCB and toxic levels in the sludge decrease to the point where farmers will accept it.

The sludge drying beds and storage lagoons will be asphalt lined to prevent leachate from entering Clear Creek. The landfill not only will be lined, but also will be provided with tiles and a sump to pump any leachate back to the plant for treatment. Consequently, adverse impacts are not expected.

D. Public Participation and Hearings

The disposal of sludge in the Bloomington, Indiana area is an extremely controversial subject due to the existence of polychlorinated biphenyls (PCB's) in the sludge. Other metals and toxics such as zinc, copper and cadmium are also present to appreciable concentrations, which may restrict ultimate use of the sludge.

The initially selected sludge management plan was disposal of stabilized thickened sludge on Monroe County Airport grounds by land application. After a public hearing, this plan was rejected due to strong public opposition.

It was then required that a full-scale program be initiated which would focus on disposal of old PCB-contaminated stockpiled sludge and the sludge management options for the new WWTP. A citizens's advisory committee was formed and held 3 meetings in August 1980 as revised sludge management alternatives were being analyzed. An additional public hearing for informational purposes was also held in August 1980. Twelve final options were screened and presented to the citizens advisory committee resulting in selection of long-term (20 year) lagooning at a Salt Creek - Clear Creek confluence site. An additional public hearing was held in January 1981 and the revised plan was submitted to the State and EPA. This plan was rejected on technical and environmental grounds by the regulatory agencies.

The final alternatives considered were lagoon disposal at the Dillman Road WWTP site, interim lagoon disposal with land application after several years, additional mechanical dewatering prior to landfilling, and drying beds prior to landfilling. A final public hearing was held in September 1981, with drying beds and landfilling selected. This decision was based upon implementability and a critical need to proceed as the overriding factors.

It is estimated that the local share of the cost will increase monthly sewer bills by 68 cents per average user. This would amount to less than one tenth of one percent of the average family's median income on an annual basis.

E. Agencies/Environmental Groups Consulted in Development of the Plan

U.S. Environmental Protection Agency
Indiana State Board of Health
City of Bloomington Utilities Department
Bloomington Crossroads Community Association
National Speleological Society, Bloomington Grotto
Monroe County Airport Commission
Former Senator Birch Bayh
Indiana Department of Natural Resources
Monroe County Health Department
Environmental Quality and Conservation Commission, City of Bloomington
Westinghouse Corporation
League of Women Voters
Indiana Geological Society
Monroe County Plan Commission
Lake Monroe Regional Waste District
Monroe County Board of Commissioners
U.S. Army, Corps of Engineers, Louisville District

F. Reasons for Concluding the Plan will Result in no Significant Adverse Impacts

The proposed project will fill a critical need for ultimate sludge disposal from Bloomington's new 15 MGD WWTP.

Use of land adjacent to the existing site will not appreciably alter land use patterns of the area.

While construction will affect Clear Creek's banks and streambed, mitigative measures as proposed in the Final EIS for the WWTP project will be followed.

Health of the community as a whole will be protected with a safe long-term sludge disposal method. PCB contamination of the sludge should subside over the years as a result of ongoing cleanup efforts.

Cost of the project per user on a monthly basis is affordable.

Evaluation Form

1. Project Name. HUNTINGTON, INDIANA
2. Needs(Facility) No. 1820900011 NPDES No. ____
   Grant No. 180396
3. Date of Document: Year 1977 Month 05 Day 06
4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. ___ f. FNSI [X]
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: INDIANA

   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
6. Issue: SOCIO/ECON Parameter: LAND USE PLAN
7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)
8. Prediction:

   EXPANSION OF EXISTING RESIDENTIAL AND INDUSTRIAL DISTRICTS, CONSOLIDATION OF COMMERCIAL ESTABLISHMENTS AND THE EXPANSION OF PARKS AND RECREATIONAL FACILITIES
9. Source of NEPA Document Data: 1969 COMPREHENSIVE PLAN
10. Baseline Conditions: Year 1969

    COMPREHENSIVE PLAN
11. Predicted for end of planning period: Year ____

    SOME EXPANSION OF RESIDENTIAL AND INDUSTRIAL DISTRICTS. CONSOLIDATION OF COMMERCIAL ESTABLISHMENTS.

12. Predicted for current year: Year 1984

SOME IMPACT POSSIBLE

13. Actual current conditions:

NO CHANGES

14. Data Base:

15. Summary: (Code 00)

NO CHANGES IN LAND USE PLANS

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HJH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

MAY 6 1977

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: (City/County/State)City of Huntington, Huntington County, City Building, Huntington, IN 46750

Planning Area: The planning area encompasses about 70 square miles. The City of Huntington is located at the center of the planning area, and is approximately 25 miles southwest of Fort Wayne.

Proposed Project(s): To expand and upgrade the existing wastewater treatment plant by addition of activated sludge and advanced waste treatment. Combined sewer overflows are to be eliminated by the construction of an interceptor and detention ponds.

Estimated Project Cost: $19,248,400

Potential Agency Financial Share: $14,052,000

The review process has shown that significant environmental impacts which would warrant preparation of an EIS will not result from the proposed action. Any significant adverse impacts have either been eliminated by making changes in the project or resolved through mitigative measures. Consequently, a preliminary decision not to prepare an EIS has been made. This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Kent Fuller
Chief, Planning Branch

roject Location/Environmental Setting: (See attached map)
planning area encompasses about 70 square miles. The City of Huntington located at the center of the planning area, is approximately 25 miles southest of Fort Wayne and comprises the only significant population area. The topography is gently rolling glacierally-created upland cut by a wide flat river valley and many small ditches and streams. A large percentage of the land in the planning area can be classified as agricultural and woodlands.

2. Purpose of Project: To expand and upgrade the existing wastewater treatment plant by addition of activated sludge and advanced waste treatment. Combined sewer overflows are to be eliminated by the construction of an interceptor and detention basins.

A. Present Flow: 3.8 MGD B. Present Capacity: 3.1 MGD
C. Proposed Design Capacity: 5 MGD
D. Present Population: 22,900 (1975) E. Design Population: 27,300 (2000)
F. Length of sewers to be constructed, if any: 70,930 lineal ft. collection
G. Number of stream crossings, if any: 3 7,900 lineal ft. interceptor

3. Nature and Extent of Land Use Changes
A. Primary
1) Site: Existing wastewater treatment plant site to be utilized for plant expansion. Additional lands will be required for construction of detention basins.

2) Sewer Routes: Will be located along existing right-of-ways such as streets, roads and alleyways.

B. Secondary: During the 20 year planning period commencing with the operation of the new wastewater treatment plant and sewers, the City of Huntington is expected to occupy an increasing percentage of land within the planning area. Radical shifts in land use patterns are not anticipated within the planning area over the considered planning period, and the City's present land use pattern is well established and basically sound. Land use change in the future will include expansion of existing residential and industrial districts, consolidation of commercial establishments and the expansion of parks and recreational facilities.

4. Major Primary and Secondary Impacts of the Project
A. Primary/Construction-Related:
No major impacts are expected to result from the project, and those that may occur should be limited to the time and area of construction. There are no known archeological, historical or endangered plant or animal species in the planning area.

B. Secondary:
No major secondary impacts are expected to result from the project.

C. Rate of Projected Population Growth: 0.8 (%/yr.)

(PL-2/1-77)

Evaluation Form

1. Project Name. NEW CASTLE, INDIANA
2. Needs(Facility) No. 1821601001 NPDES No. ____
   Grant No. 180491
3. Date of Document: Year NA Month ____ Day ____
4. Type of Document: a. EIS ____ b. EA ____ c. EID ____ d. Facilities Plan ____ e. Negative Dec. ____ f. FNSI ✓
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: INDIANA

   ____-____-____N--____-____-____W ____-____-____N--____-____-____W
   ____-____-____N--____-____-____W ____-____-____N--____-____-____W
   ____-____-____N--____-____-____W ____-____-____N--____-____-____W
6. Issue: SOCIOECON Parameter: LAND USE PLANS
7. Type of Impact: ✓ (1=Quantitative) (2=Qualitative)
8. Prediction:
   UNLIKELY THAT INCREASED DEVELOPMENT WILL OCCUR
9. Source of NEPA Document Data: ____
10. Baseline Conditions: Year 1969
    COMPREHENSIVE PLAN
11. Predicted for end of planning period: Year ____
    NO IMPACT

12. Predicted for current year: Year 1984

NO IMPACT

13. Actual current conditions:

NO IMPACT

14. Data Base: 1969 COMPREHENSIVE PLAN

15. Summary: (Code 001)

NO IMPACT - NO CHANGES IN LAND USE

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HJH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

New Castle, Indiana
Environmental Assessment
for the
Bundy Avenue Interceptor

A. *Project Identification:*
Project Name and Number: City of New Castle, C180490 01
Adress: City Building, New Castle, Indiana 47362

State Agency Representative:
Oral H. Hert, Technical Secretary
Indiana Stream Pollution Control Board

Authorized Representative's Name and Title:
M. E. Scott
City Engineer

For further information on this project contact:
Jonathan J. Schweizer, USEPA
230 S. Dearborn Street, Chicago, Illinois 60604

B. Background of this project:
On February 3, 1975 the City of New Castle was awarded a Step 1 wastewater treatment works grant (C180490 01) to prepare a facilities plan. A facilities plan segment, which was approved on August 31, 1976, recommended upgrading of the wastewater treatment plant to include ammonia-nitrogen and phosphorous removal, and replacement of an undersized interceptor along the Big Blue River. Also recommended was the performance of a PRM 75-34 study to address the impact and needed control of combined sewer overflows. Subsequent Step 2 and Step 3 grants funded only the treatment plant improvements, since sizing of the new intercepting sewer had to await the results of the combined sewer overflow (CSO) study.

A Step 1 grant amendment to cover the cost of the CSO study was awarded to New Castle on January 3, 1977. The final CSO report recommended construction of the following facilities:

1. A new interceptor, to be located in the flood plain of the Upper Big Blue River, extending from Bowery Brook to the wastewater treatment plant, and ranging in diameter from 24" to 60".
2. An interceptor from the Bundy Avenue overflow to the Bowery Brook interceptor.
3. A 10 million gallon lagoon immediately north of the treatment plant, on the plant site.
4. A storm water pump station, also on the plant site.

The Finding of No Significant Impact (FNSI) issued on August 6, 1976 (at that time known as a Negative Declaration) addressed the proposed interceptor in the flood plain of the Upper Big Blue River, as well as the wastewater treatment plant site. Of the facilities proposed in the CSO report, only the Bundy Avenue interceptor needs to be addressed by this new FNSI. Since all the facilities were interrelated in choosing the final alternative, however, the entire project will be described.

C. Project Location and Description:
The project is located in New Castle, Indiana and is northeast of the center of Henry County in east central Indiana. This project segment involves the design and construction of 4860 lineal feet of 24" diameter interceptor sewer from the Bundy Avenue overflow to the Bowery Brook interceptor which has already been approved. The purpose of the project is to convey the first flush flow from the Bundy Avenue overflow to the Bowery Brook interceptor and eliminate a portion of the open ditch conveyance of combined sewer discharge through business and residential areas. Project costs are as follows:

Total Project Costs:	$6,576,875
*Potential EPA Costs:	$4,932,656
*Potential State Grant:	$ 657,687

The implementation schedule for the project is as follows:

Submit Step 2 application	30 days after CSO report approval
Step 2 completion	6 months after Step 2 award
Submit Step 3 application	30 days after Plans & Specifications approval
Commence construction	6 months after Step 3 award
Complete construction	30 months after Step 3 award

The project is necessitated by the presence of combined sewer overflows into the Big Blue River, which result in severe depletion of dissolved oxygen, which is detrimental to aquatic life, as well as high bacterial counts which present a hazard to swimmers and other recreational users of the river.

D. Impacts of the Project on the Environment:

1. Primary impacts:
The new Bundy Avenue interceptor will carry first flush flow to the Bowery Brook interceptor, thereby capturing 70 - 80% of the pollutant load at a fraction of the cost of providing either total treatment or complete sewer separation. The 10 million gallon lagoon will provide storage for the 2-year 4-hour storm with aeration until it can be bled back to the treatment plant. Therefore, the water quality in the Big Blue River will be greatly improved, though not improved as much as it would be with total CSO treatment or sewer separation.

Construction related impacts include erosion, destruction of vegetation, dust, noise, traffic and inconvenience to local residents. These impacts will not be nearly as great as they would be if total CSO treatment were to be provided for. The project will also involve an irreversible commitment of land and construction materials. The route of the Bundy interceptor parallels that of two existing sewer lines. Therefore, there will be no effect on any archaeological or historic sites because any sites would have already been disturbed by previous excavation. A review of the proposed project by the State Historic Preservation Office - Indiana Department of Natural Resources has confirmed the absence of any archaeological sites in the service area.

* Subject to eligibility determination(s) at time of award(s). Costs which would be disallowed include, but are not limited to, legal costs, bond counsel, interest during construction, and purchase of easements.

2. Secondary Impacts:
Since the number and severity of combined sewer overflow incidents would only be reduced and not eliminated, areas in close proximity to the overflows would still be considered undesirable for development. Therefore, it is unlikely that the project will bring about any long term changes in land use patterns. No treatment plant expansion will be required. Since increased development is not expected to occur, there should not be any increase in automobile traffic, therefore, the project should have no adverse effect on air quality.

A public hearing was held on November 29, 1979 at 6:00 PM EST at the City Hall Annex, 321 S. Main Street, New Castle, Indiana for discussion of the combined sewer overflow control facilities recommended in the CSO report. Five individuals attended and the results of the study, including costs, were presented by Mr. Samuel L. Moore of Butler, Fairman & Seufert, Inc. consulting engineers. There were no questions or comments.

Proposed costs to users are based on the following (assuming 85% EPA and State funding for the combined sewer overflow control project.)

Average Annual Equivalent Cost	$ 56,624
Operation & Maintenance	$118,691
	$175,315

$\frac{\$175,315}{7,000 \text{ residences}}$ = 25.04/residence/year - 12 months/year
= $2.09/user/month

The economic impact of the project, to the average New Castle resident is based on information supplied by the U. S. Census Bureau, Department of Commerce and is shown on the following table.

1980 Average per Capita Income New Castle = $6,344 *

1980 Estimated Population	22,117
Total Estimated Income	$140,310,000
No. of Homes in New Castle	7,000
Median Home Income	$20,044
Estimated Monthly User Rate	$12.59

$\frac{\$12.59 \times 12}{\$20,044}$ = 0.75% of median home income to be spent for the project

According to guidance in Program [illegible]ements Memorandum (PRM) 79-8 "Small Wastewater Systems," the project d[illegible] not constitute an economic hardship.

* 1975 per capita income updated to 1980 using a 7% annual inflation rate.

Agencies and environmental groups consulted during facilities planning include the Indiana Stream Pollution Control Board, Indiana Department of Natural Resources, U. S. Environmental Protection Agency, and the City of New Castle.

It is not expected that the project will have any significant adverse impacts because the construction of the Bundy interceptor will be along existing rights-of-way, and the pump station and lagoon will be built on the existing treatment plant site. As discussed under secondary impacts, no significant secondary impacts are expected. Any construction related impacts will be minimized during construction and mitigated upon completion. In addition, the selected alternative would eliminate 70 -80% of the pollutant loading to the Big Blue River.

The following alternatives were considered in the combined sewer overflow study:

1. Storage and bleed-back of all flows
2. Storage at 3 lagoons and bleed-back of subsystem discharges
3. Some storage, some screening of subsystem discharges
4. Some storage, some underflow clarification of discharges
5. Construction of new sanitary sewers
6. Construction of new storm sewers
7. Treatment of first flush
8. Bowery Brook and Bundy Avenue interceptors only

Final costs calculated for each alternative were as follows:

Alternative	Capital Cost	Incremental O & M	Salvage Value	Total Present Worth	Federal & State Grant	Local Share
1	$33,929,542	207,179	15,401,163	18,528,379	28,840,111	5,089,431
2	$18,512,675	203,610	7,108,543	11,404,132	15,735,774	2,776,901
3	$20,487,691	164,270	4,262,962	16,224,729	17,414,537	3,073,154
4	$16,316,441	154,240	4,262,962	12,053,479	13,868,975	2,447,463
5	$22,972,643	32,490	13,738,586	9,189,057	19,526,747	3,445,833
6	$33,385,744	41,312	20,031,466	13,354,298	28,377,882	5,007,882
7	$ 6,576,875	118,691	2,290,590	4,286,285	5,590,344	986,531
8	$ 4,656,975	4,646	2,794,185	1,862,790	3,958,429	698,545

Alternative #7 was chosen not only for its low cost but also because the primary and secondary impacts are not as severe as they would be for several of the alternatives. Alternative #1 would provide excellent removal of pathogens, flotables, CBOD, NBOD, etc., however, some development might be induced. Further, the primary construction impacts would be severe due to the huge structures which would need to be built, e.g. 108" sewers and a 460 MGD lift station. Alternative #2 would have similar, though less severe impacts. In addition the use of three storage sites would require a large permanent land commitment. Alternatives 3 and 4, like 7, represent compromises whereby cost savings would be realized and construction impacts would be less but only partial pollution abatement would be attained. Secondary impacts would not be significant for alternatives 3 or 4. Alternative #5 would all but eliminate the combined sewage problem and is less costly then alternatives 1 - 4. However, it would allow for increased residential development in areas where ponds and treatment facilities would otherwise be needed. Also, construction impacts of building an entire new sanitary

12. Predicted for current year: Year 1984

INCREASED DEVELOPMENT

13. Actual current conditions:

NO IMPACT

14. Data Base: 1973 COMPREHENSIVE PLAN

15. Summary: (Code 00)

NO IMPACT-NO CHANGES IN LAND USE PLAN

16. Regulations in Effect:

A.Baseline:

Today:

B.Baseline:

Today:

C.Baseline:

Today:

17. Reviewer: HJH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

Evaluation Form

1. Project Name. GRAND RAPIDS MICHIGAN

2. Needs(Facility) No. 26031301 NPDES No.

Grant No. 262654

3. Date of Document: Year 1977 Month 06 Day 20

4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☑

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: MICHIGAN

-- N-- -- W -- N-- -- W

-- N-- -- W -- N-- -- W

-- N-- -- W -- N-- -- W

6. Issue: SECTION Parameter: LAND USE

7. Type of Impact: 2 (1-Quantitative) (2-Qualitative)

8. Prediction:

EXPECTED TO ENCOURAGE AN INCREASE IN RESIDENTIAL DEVELOPMENT

9. Source of NEPA Document Data:

10. Baseline Conditions: Year 1973

COMPREHENSIVE PLAN

11. Predicted for end of planning period: Year

INCREASED DEVELOPMENT

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST
CHICAGO, ILLINOIS 60604

JUN 20 1977

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: (City/County/State) City of Grand Rapids, Kent County, Michigan

Planning Area: The Eastmont area of Grand Rapids Township and the Eastmont and Driftwood areas of Ada Township, Kent County, Michigan C262654

Proposed Project(s): Construction of sanitary collection sewers to serve the communities of Eastmont and Driftwood. Collection sewers will be connected to existing trunk sewers in the area.

Estimated Project Cost: $1,100,000

Potential Agency Financial Share: $825,000

The review process has shown that significant environmental impacts which would warrant preparation of an EIS will not result from the proposed action. Any significant adverse impacts have either been eliminated by making changes in the project or resolved through mitigative measures. Consequently, a preliminary decision not to prepare an EIS has been made. This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Kent Fuller
Chief, Planning Branch

(PL-5/1-77)

PROJECT SUMMARY

1. Project Location/Environmental Setting: (See attached map)

   The project is located in the Eastmont area of Grand Rapids Township and the Eastmont and Driftwood areas of Ada Township in Kent County, Michigan. The area is a semi-rural developing suburban area of Grand Rapids, Michigan.

2. Purpose of Project: The project will eliminate pollution resulting from malfunctioning septic systems.

   A. Present Flow: Not applicable B. Present Capacity: Not applicable
   C. Proposed Design Capacity: Not applicable
   D. Present Population: 1420 E. Design Population: 1850
   F. Length of sewers to be constructed, if any: 40,000 L.F.
   G. Number of stream crossings, if any: None

3. Nature and Extent of Land Use Changes
   A. Primary
      1) Site: Not applicable - project will discharge into existing Grand Rapids system.

      2) Sewer Routes: None - sewers will be constructed along existing streets and will be connected to existing trunk sewers.

   B. Secondary: The availability of sewers would be expected to encourage an increase in residential development in the area.

4. Major Primary and Secondary Impacts of the Project
   A. Primary/Construction-Related:
   The project will eliminate existing malfunction of septic systems in the area. The project will be disruptive during the period of sewer construction since streets and rights-of-way will have to be excavated. Dust, noise and run-off from excavated materials may be a problem during construction of the sewer system.

   B. Secondary: The installation of sewers will control where future residential development will take place. It will also be possible to develop denser residential areas since field tile systems will no longer be required.

   C. Rate of Projected Population Growth: 1.5 (%/yr.)

(PL-2/1-77)

Evaluation Form

1. Project Name. KALAMAZOO, MICHIGAN
2. Needs(Facility) No. 260/08001 NPDES No. ____
   Grant No. 262523
3. Date of Document: Year 1972 Month 09 Day 09
4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☑
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: MICHIGAN

   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W

6. Issue: SOCIOECON Parameter: LAND USE PLANS
7. Type of Impact: ☑ (1=Quantitative) (2=Qualitative)
8. Prediction:

   POTENTIAL FOR INCREASED DEVELOPMENT OF OUTLYING PORTIONS OF PLANNING AREA. INCREASED RESIDENTIAL DEVELOPMENT NEAR METROPOLITAN AREA

9. Source of NEPA Document Data: ____
10. Baseline Conditions: Year 1970

    COMPREHENSIVE PLAN

11. Predicted for end of planning period: Year ____

    SOME DEVELOPMENT

12. Predicted for current year: Year 1984

SLIGHT AMOUNT OF DEVELOPMENT

13. Actual current conditions:

NO CHANGES

14. Data Base: 1970 COMPREHENSIVE PLAN

15. Summary: (Code 00)

NO IMPACT-NO CHANGE IN LAND USE PLAN

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HNH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST
CHICAGO, ILLINOIS 60604

SEP 9 1977

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: (City/County/State) City of Kalamazoo, 241 West South Street Kalamazoo, Michigan 49006 Project No. C262583

Planning Area: This segment evaluates advanced wastewater treatment for the City of Kalamazoo for a 20 year planning period; it is a part of the Kalamazoo Metropolitan Area facilities plan.

Proposed Project(s): Construction of single-stage biophysical treatment system to produce advanced wastewater treatment for the expanded 53.3 MGD Kalamazoo sewage treatment plant.

Estimated Project Cost: $65,000,000 design and construction

Potential Agency Financial Share: $48,750,000 Design and Construction

The review process has shown that significant environmental impacts which would warrant preparation of an EIS will not result from the proposed action. Any significant adverse impacts have either been eliminated by making changes in the project or resolved through mitigative measures. Consequently, a preliminary decision not to prepare an EIS has been made. This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Kent Fuller
Chief, Planning Branch

PROJECT SUMMARY

1. Project Location/Environmental Setting: (See attached map)

City of Kalamazoo, Michigan. Expanded regional treatment plant will serve urbanized metropolitan area with surrounding residential and agricultural communities.

2. Purpose of Project: Design and construction of advanced wastewater treatment facilities to service Kalamazoo and surrounding areas for Design Year 2000; advanced treatment will permit the City to meet its final NPDES effluent limitations, and correct an existing pollution problem in the Kalamazoo River.

A. Present Flow: 34 MGD B. Present Capacity: 12 MGD Primary 34 MGD Secondary
C. Proposed Design Capacity: 53.3 MGD (2000)
D. Present Population: 88,700(670,000PE) E. Design Population: 263,000 (935,000 P.E.
F. Length of sewers to be constructed, if any: None
G. Number of stream crossings, if any: None *

3. Nature and Extent of Land Use Changes

A. Primary

1) Site: Minor changes will occur on the existing plant site; these changes will be in conformance with the designated use of the site. This project will not require the removal of houses or other buildings.

2) Sewer Routes: None, no sewers proposed in this segment.

B. Secondary: Potential for increased development of outlying portions of the overall planning area. Some agricultural and vacant land near the metropolitan area is expected to change to residential land uses because of the availability of existing interceptors and additional capacity in the proposed expanded treatment plant. Impacts of collection sewers have been addressed in previous negative declarations dealing with collection sewers in the townships.

4. Major Primary and Secondary Impacts of the Project

A. Primary/Construction-Related:

The water quality of the Kalamazoo River will be enhanced by the reduction of pollutant discharges from the Kalamazoo plant. Odors from the existing treatment plant will be reduced or eliminated. Temporary impacts will include noise, dust, erosion and traffic congestion in the construction area; these effects will be minimized by proper construction techniques.

B. Secondary: The expanded treatment plant capacity can accommodate potential future growth in the planning area. There will be increased employment in the construction trades in the planning area during the construction period.

C. Rate of Projected Population Growth: 1.0 (%/yr.)

(PL-2/1-77) * Design population reflects significant increase in service area.

Evaluation Form

1. Project Name. ROCHESTER, MINNESOTA
2. Needs(Facility) No. 2710430 P1 NPDES No. ____
   Grant No. 2710814
3. Date of Document: Year 1978 Month 10 Day 24
4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. ___ f. FNSI ✓
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: MINNESOTA

   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
6. Issue: SOCIOECONOMIC Parameter: LAND USE PLAN
7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)
8. Prediction:

   IMPACTS SHOULD NOT BE EXTENSIVE. SOME OPEN SPACE MAY BE CONVERTED TO RESIDENTIAL
9. Source of NEPA Document Data: ____
10. Baseline Conditions: Year 1972

    COMPREHENSIVE PLAN
11. Predicted for end of planning period: Year ____

    NO EXTENSIVE DEVELOPMENT

12. Predicted for current year: Year 1984

SOME POSSIBLE DEVELOPMENT

13. Actual current conditions:

MINOR CHANGES

14. Data Base: 1972 COMPREHENSIVE PLAN (AMENDED)

15. Summary: (Code +1)

MINOR CHANGES IN COMPREHENSIVE PLAN NOT EXTENSIVE OR OF SIGNIFICANT IMPACT

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST
CHICAGO, ILLINOIS 60604

24 OCT 1978

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: (City/County/State) Rochester/Olmsted/Minnesota

Planning Area: The study area is located within the upper Zumbro River Watershed of the Mississippi River Basin. The individual cities in the area are Dodge Center, Mantorville, Kasson, Byron, Pine Island, Oronoco and Rochester.

Proposed Project(s): The project proposes to upgrade the existing Rochester Sewage Treatment plant. The existing plant consists of 2 grit removal tanks, 2 pre-aeration tanks, 2 primary settling tanks, 2 aeration tanks, 2 intermediate settling tanks, 4 trickling filters, 3 final settling tanks, 2 chlorine contact tanks, 1 sludge thickening tank, 4 anaerobic digesters and 1 sludge drying bed. The new sewage treatment plant will include the following units: a new lift station, 3 equalization clarifiers, covers for the existing grit removal tank and pre-aeration tanks, 4 covered primary clarification units will be constructed, and a 2 stage pure oxygen aeration tank will also be constructed. There will be 6 covered aeration tanks in each stage. The 2 existing intermediate settling tanks will be covered and 2 more covered intermediate clarifiers will be constructed. Four final settling tanks will be constructed. The 3 existing final tanks will be utilized as chlorination chambers. Phosphorus removal equipment will be constructed. The existing anaerobic digesters will be used for primary sludge digestion only, while the existing primary clarification units and aeration tanks would be utilized for aerobic digestion of secondary sludge and sludge storage. Three centrifuge units will be constructed. Following centrifuging of combined primary, and digested waste activated sludge, the sludge would be stored in the existing sludge thickening tank prior to being hauled to land by liquid sludge trucks. The trickling filters and the sludge drying bed will be abandoned. A new administrative building, laboratory and a minicomputer for operational control will be constructed. Odor control will be provided for exhaust gas from all covered treatment units.

Estimated Project Cost: Step 2 (design) = $1,561,300
Step 3 (construction) = $37,000,000

Potential Agency Financial Share: Step 2 (design) = $1,170,975
Step 3 (construction) = $27,750,000

PROJECT SUMMARY

1. Project Location/Environmental Setting: (See attached map) Rochester is located in southeastern Minnesota within the Upper Zumbro River Watershed of the Mississippi River Basin. The streams in the area support a variety of game fish, rough fishes and forage fish. Various types of wildlife inhabit the study region, among which are muskrat, mink, etc. White tail deer also inhabit the study area.

2. Purpose of Project: Presently the Rochester sewage treatment plant can meet effluent limits of 25 mg/l Biochemical Oxygen Demand (BOD) and 30 mg/l Suspended Solids (S.S.). However, in order to meet its more stringent limits of 14 mg/l BOD, 20 mg/l S.S., 1.5 mg/l NH3-N and 1 mg/l phosphorus, the STP must be upgraded. These limits were determined in a waste load allocation study and a public hearing process. The upgrading should help improve the water quality of Lake Zumbro and the south fork of the Zumbro River.

A. Present Flow: 9.5 M.G.D. B. Present Capacity: 12.5 M.G.D.
C. Proposed Design Capacity: 19.1 M.G.D. (Average day peak month)
D. Present Population: 66,332 and 8,000 transient
E. Design Population: 91,330 and 15,000 transient
F. Length of sewers to be constructed, if any: none
G. Number of stream crossings, if any: none

3. Nature and Extent of Land Use Changes:
A. Primary
1) Site: Most of the upgrading will occur on the site of the existing sewage treatment plant. However, some of the plant expansion area lies generally south and west of the present facilities. The area east of the existing road is already maintained as part of the plant site. The area west of the existing road consists of agricultural crop land and an area growing young softwood species where a farmstead existed until 6-8 years ago. Immediately west of the the expansion area, the property is occupied by an electrical substation.
2) Sewer Routes: None proposed.
B. Secondary: The secondary impacts should not be extensive. The sanitary service area should increase as per the bounds described in Rochester's Sanitary Sewer and Water Study. Some open space area may be converted to residential use during the life of the project. However, Rochester has the necessary infrastructure to incorporate the additional development.

4. Major Primary and Secondary Impacts of the Project:
A. Primary/Construction Related: The major impacts of the proposed plan will occur in the immediate area of the existing treatment plant. Construction related impacts include increased fugitive dust, increased erosion and sedimentation, and increased noise level from construction related equipment. The former farmland around the treatment plant will be lost to the expanded sewage treatment plant.
B. Secondary:
1) Improved water quality in the south fork of the Zumbro River and Lake Zumbro.
2) Ability to comply with their NPDES permit.

3) Downstream recreational capabilities will be enhanced due to reduced pollution in the stream.

4) The irretrievable and irreversible commitment of physical and fiscal resources on the part of the community.

C. Rate of Projected Population Growth: 2 (%/yr)

5. Discussion of Environmental Impacts: The negative or adverse environmental impacts of this project will be minimal. The project proposes the upgrading of the sewage treatment plant in and around the existing plant site. Construction related impacts should be temporary and minimal. Although the increased capacity of the sewage treatment plant may ensure the projected growth, Rochester has the necessary infrastructures as well as a comprehensive land use plan to absorb the additional growth and adequately protect the ambient environment.

The project should improve the water quality of Lake Zumbro and the south fork of the Zumbro River. Lake Zumbro is in a serious eutrophic condition and is the only multipurpose recreational lake within a 30 mile radius of the city. The STP presently contributes about 77% of the phosphorus to the Lake. The project should improve the condition of the Lake.

Evaluation Form

1. Project Name. STCLOUD MINNESOTA
2. Needs(Facility) No. ____ NPDES No. ____
   Grant No. ____
3. Date of Document: Year 1976 Month ____ Day ____
4. Type of Document: a. EIS ____ b. EA ____ c. EID ____ d. Facilities Plan ____ e. Negative Dec. ✓ f. FNSI ____
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: MINNESOTA

   ____-____-____N--____-____-____W ____-____-____N--____-____-____W
   ____-____-____N--____-____-____W ____-____-____N--____-____-____W
   ____-____-____N--____-____-____W ____-____-____N--____-____-____W
6. Issue: SOCIOECON Parameter: LAND USE PLANS
7. Type of Impact: 2 (1= Quantitative) (2= Qualitative)
8. Prediction:
   SLIGHTLY STIMULATE LAND DEVELOPMENT
9. Source of NEPA Document Data: ____
10. Baseline Conditions: Year 1970
    COMPREHENSIVE PLAN
11. Predicted for end of planning period: Year ____
    SLIGHT STIMULATION OF DEVELOPMENT

12. Predicted for current year: Year 1984

SOME DEVELOPMENT POSSIBLE

13. Actual current conditions:

NO IMPACT

14. Data Base: 1970 COMPREHENSIVE PLAN

15. Summary: (Code 09)

NO IMPACT - NO CHANGES IN LAND USE PLANS

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HJH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

PROJECT SUMMARY

1. Project Location - See attached map

2. Purpose of Project: Construction of a combined interceptor sewer that will relieve raw sewage discharges to the Mississippi River and will add to the amount of clean water conveyed and treated at the Metro Treatment Plant. Separation of combined sanitary and storm sewers will be undertaken at a later date at local expense.

3. Nature and Extent of Land Use Changes: The project is expected to only slightly stimulate land development in the service area. This will occur through the provision of adequate interceptor and trunk capacity to sparsely developed areas. Land use changes will also occur along the route of the interceptor in the form of tree removal.

4. Major Primary and Secondary Impacts of the Project on the Environment:

Improved water quality in the Mississippi River and reduce wastewater costs. Tree removal along the route of the interceptor. This has been minimized by selecting an alternative interceptor route with a majority of American Elm trees whose longevity is limited by the Dutch Elm Disease. All trees removed will be replaced by minimum 2 1/2" diameter stock on a one-for-one basis.

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements, an environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: City of St. Cloud, Minnesota

Planning area: Corporate limits of the Cities of St. Cloud, Waite Park, Sauk Rapids, Sartell, St. Joseph, and St. Augusta and surrounding areas AL or parts of St. Cloud St. Joseph, St. Wendel, St. Augusta, Minden, Haven, Sauk Rapids, and Le Sauk Township.
Proposed Project(s): Construction of a sanitary interceptor sewer to relieve combined sewer overflows to the Mississippi River. Location of sanitary interceptor sewer is shown on enclosed map.
Estimated Project Cost: Step 2: $106,000
Step 3: 4.4 Million

Potential Agency Financial Share: Step 2: $80,000
Step 3: 3.3 Million

The review process did not indicate that significant environmental impacts would result from the proposed action. Any significant adverse impact were eliminated by making changes in the project. Consequently, a preliminary decision not to prepare an EIS has been made.

This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Harlan D. Hirt
Chief, Planning Branch

Evaluation Form

1. Project Name. KENT OHIO
2. Needs(Facility) No. 3 9 4 0 2 5 0 0 V NPDES No.
   Grant No. 3 9 1 / 0 0 0 2
3. Date of Document: Year 1 9 7 7 Month 0 8 Day 3 0
4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☑ f. FNSI ☐
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: MINNESOTA

   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
6. Issue: SOCIOECON Parameter: LAND USE PLANS
7. Type of Impact: 2 (1= Quantitative) (2= Qualitative)
8. Prediction:
   WILL ALLOW INCREASED DEVELOPMENT
9. Source of NEPA Document Data:
10. Baseline Conditions: Year 1 9 7 0
    COMPREHENSIVE PLAN
11. Predicted for end of planning period: Year
    SOME INCREASED DEVELOPMENT

12. Predicted for current year: Year 1984

SOME DEVELOPMENT POSSIBLE

13. Actual current conditions:

NO IMPACT

14. Data Base: 1970 COMPREHENSIVE PLAN

15. Summary: (Code 09)

NO CHANGES IN LAND USE PLAN

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HJH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

AUG 30 1977

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: (City/County/State) Kent, Portage County, Ohio.

Planning Area: The City of Kent is situated in western Portage County with the Summit/Portage County line constituting its western boundary. The total service area will be 3260 acres.

Proposed Project(s): Kent WWTP to be modified to provide improved effluent quality of discharge to Cuyahoga River to meet NPDES permit requirements, provide for improved sludge treatment and disposal.

Estimated Project Cost: Step 2: 325,500
Step 3: 4,526,400

Potential Agency Financial Share: Step 2: 244,125
Step 3: 3,394,800

The review process has shown that significant environmental impacts which would warrant preparation of an EIS will not result from the proposed action. Any significant adverse impacts have either been eliminated by making changes in the project or resolved through mitigative measures. Consequently, a preliminary decision not to prepare an EIS has been made. This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Kent Fuller
Chief, Planning Branch

PROJECT SUMMARY

1. Project Location/Environmental Setting: (See attached map)
The City of Kent is situated in the west-central region of Portage County. On the West it is limited by the boundaries of Summit - Portage County line. The City is moderately industrial but population is educationally oriented (Kent State).

2. Purpose of Project:
To upgrade the Kent Wastewater Treatment Plant in order to meet required NPDES permit limits.

A. Present Flow: 3.0 mgd B. Present Capacity: 4 mgd
C. Proposed Design Capacity: 5 mgd
D. Present Population: 27,540 E. Design Population: 40,000
F. Length of sewers to be constructed, if any: N/A
G. Number of stream crossings, if any: N/A

3. Nature and Extent of Land Use Changes
A. Primary
1) Site:
The proposed treatment plant expansion and modification will be constructed at the existing plant location.

2) Sewer Routes:
N/A

B. Secondary:
N/A

4. Major Primary and Secondary Impacts of the Project
A. Primary/Construction-Related:
1. Temporary increase in suspended solids in the river due to runoff from excavated areas.
2. Although noise and dust will be generated by standard construction equipment, it will not be detrimental to humans or wildlife.

B. Secondary:
1. Noise levels increased during operation (Jul - Oct) when additional compressed air is required for nitrification.
2. Improve the quality of the effluent entering Cuyahoga River.
3. Will allow increased development of the planning area.
4. Additional amounts of chemical and electrical energy required for plant operation.

C. Rate of Projected Population Growth: 1.9% (%/yr.)

(PL-2/1-77)

Evaluation Form

1. Project Name. CANTON OHIO
2. Needs(Facility) No. 39/1312360 1/ NPDES No. ____
   Grant No. 390624
3. Date of Document: Year 1972 Month 04 Day 24
4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. ___ f. FNSI ___
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: OHIO

   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W
   ___-___-___N--___-___-___W ___-___-___N--___-___-___W

6. Issue: SOCIOECONOM Parameter: LAND USE PLANS
7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)
8. Prediction:

   RATE OF FUTURE DEVELOPMENT WILL INCREASE

9. Source of NEPA Document Data: ____
10. Baseline Conditions: Year 1967

    COMPREHENSIVE PLAN

11. Predicted for end of planning period: Year ____

    INCREASED DEVELOPMENT

12. Predicted for current year: Year 1984

UNCREASED DEVELOPMENT

13. Actual current conditions:

SOME NEW DEVELOPMENT

14. Data Base: 1967 COMPREHENSIVE PLAN

15. Summary: (Code +1)

NO SIGNIFICANT DIFFERENCE IN PROJECTION

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JJA 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST
CHICAGO, ILLINOIS 60604

JUL 26 1977

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements (EIS), an environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: (City/County/State) Canton, Stark County, Ohio.

Planning Area: The planning area includes the City of Canton, North Canton Louisville and portions of Stark County.

Proposed Project(s): The project consists of improvements at the existing Canton Water Pollution Control Facility and a new intercepting sewer paralleling the general route of existing sewers along the Nimishillen Creek and West Branch of Nimishillen Creek.

Estimated Project Cost: Step: 3 $12,900,000

Potential Agency Financial Share: Step: 3 $9,675,000

The review process has shown that significant environmental impacts which would warrant preparation of an EIS will not result from the proposed action. Any significant adverse impacts have either been eliminated by making changes in the project or resolved through mitigative measures. Consequently, a preliminary decision not to prepare an EIS has been made. This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Gary A. Williams

for Kent Fuller
Chief, Planning Branch

(PL-5/1-77)

1. Project Location/Environmental Setting: (See attached map)

This project, serving approximately 18,645 acres, includes Canton, North Canton, Louisville and portions of Stark County which lie within the Facilities Planning Area for the Nimishillen Basin.

2. Purpose of Project:

For improvements to the Canton's sewerage system such as; advance secondary treatment process and modification of existing main and West side intercepting sewers in order to meet final effluent limitations as set forth in the NPDES permit of 9 mg/l BOD and 6mg/l SS.

A. Present Flow: 28 MGD B. Present Capacity: 33 MGD
C. Proposed Design Capacity: 44 MGD
D. Present Population: 150,300 E. Design Population: 254,430
F. Length of sewers to be constructed, if any: 21,700 LF
G. Number of stream crossings, if any: N/A

3. Nature and Extent of Land Use Changes

A. Primary

1) Site:

N/A

2) Sewer Routes:

The sewer will either be replaced or parallel to the existing sewer in the right-of-way thus causing no additional Land Use Changes.

B. Secondary:

N/A

4. Major Primary and Secondary Impacts of the Project

A. Primary/Construction-Related:

Primary impact includes the disruption of traffic, noise, dust, minor land erosion, and siltation.

B. Secondary:

The quality of groundwater will be improved by alleviating the polluting effect of leaching of raw sewage from surcharged sewers.

The rate of future land development in Stark County planning area will increase as a result of the proposed intercepting sewer and WPCC improvements.

C. Rate of Projected Population Growth: 2.0 (%/yr.)

(PL-2/1-77)

Evaluation Form

1. Project Name. SANDUSKY OHIO

2. Needs(Facility) No. 39741310011 NPDES No. ____

Grant No. 391117

3. Date of Document: Year 1975 Month 11 Day 06

4. Type of Document: a. EIS ___ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. ___ f. FNSI ___

5 Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: OHIO

___-___-___N--___-___-___W ___-___-___N--___-___-___W

___-___-___N--___-___-___W ___-___-___N--___-___-___W

___-___-___N--___-___-___W ___-___-___N--___-___-___W

6.Issue: SOCIOECONOMIC Parameter: LAND USE PLANS

7. Type of Impact: 2 (1=Quantitative) (2=Qualitative)

8. Prediction:

MAY RESULT IN ENCOURAGING FURTHER RESIDENTIAL AND COMMERCIAL DEVELOPMENT

9. Source of NEPA Document Data: ____

10. Baseline Conditions: Year 1971

COMPREHENSIVE PLAN

11. Predicted for end of planning period: Year ____

POSSIBLE DEVELOPMENT

12. Predicted for current year: Year 1984

POSSIBLE DEVELOPMENT

13. Actual current conditions:

NO IMPACT

14. Data Base: 1971 COMPREHENSIVE PLAN

15. Summary: (Code 00)

NO CHANGES IN LAND USE PLANS

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST
CHICAGO, ILLINOIS 60604

NOV 6 1975

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements, an environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: City of Sandusky, Ohio

Planning Area: City of Sandusky, Ohio and adjoining areas in Erie County, south to the Ohio Turnpike, including parts of Margretta, Perkins, Huron, Oxford, and Groton Townships.

Proposed Project(s): Construction of new sludge handling facilities and appurtenances acquisition of equipment needed for land application of digested sludge, facilities include sludge concentrators, anaerobic digestors, dewatering and lime storage equipment, and hauling equipment.

Estimated Project Cost:

Step 2 $168,000 Step 3 $2,926,000

Potential Agency Financial Share:

Step 2 $126,000 Step 3 $2,194,000

The review process did not indicate that significant environmental impacts would result from the proposed action or significant adverse impacts have been eliminated by making changes in the project. Consequently, a preliminary decision not to prepare an EIS has been made.

This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Harlan D. Hirt
Chief, Planning Branch

PROJECT SUMMARY

1. Project Location - See attached map

   City of Sandusky, Ohio and surrounding portions of Erie County.

2. Purpose of Project:

   Preparation of sludge handling and treatment facilities for the application of liquid sludge on farmlands. The project includes expansion of existing sludge treatment facilities at the Sandusky wastewater treatment plant. New equipment will include sludge concentrators, anaerobic digestors, sludge dewatering and lime storage equipment, and hauling equipment and appurtenances.

3. Nature and Extent of Land Use Changes:

   Sewage treatment plant expansion will be at the site of the existing treatment plant. No additional land will be acquired. Land application of sludge will utilize existing cultivated land; and will not change its agricultural function.

   The improvement in sewerage service and thus water quality may result indirectly in encouraging further residential and commercial development in the Sandusky service area.

4. Major Primary and Secondary Impacts of the Project on the Environment:

   The primary impacts of the project include the adverse short term construction effects at the sewage treatment plant site, such as noise, dust, and minor siltation. In addition, there will be increased truck traffic due to sludge hauling for the duration of treatment plant lifetime (estimated 16 trucks trips per day). Farmland fertility should be enhanced by the project. Water quality improvement is the ultimate impact.

   Secondary impacts will include the encouragement of further development in the service are, improvement of wildlife habitat, and protection of contact uses of water.

Increased capacity and degree of treatment must be provided to handle the increased total waste load and thus prevent any public health problems and ensure the integrity of the Rock River.

C. Rate of Projected Population Growth: 3 (%/yr,)

Evaluation Form

1. Project Name. EAU CLAIRE WISCONSIN
2. Needs(Facility) No. 551/470101 NPDES No.
   Grant No. 5510628
3. Date of Document: Year 1976 Month 12 Day 15
4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☑ f. FNSI ☐
5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: WISCONSIN

   N-- -- -- W N-- -- -- W
   N-- -- -- W N-- -- -- W
   N-- -- -- W N-- -- -- W
6. Issue: SOCIOECON Parameter: LAND USE PLANS
7. Type of Impact: 2 (1= Quantitative) (2= Qualitative)
8. Prediction:
   NOT SIGNIFICANTLY AFFECTED SINCE DEVELOPMENT WILL BE DICTATED BY OTHER CONSTRAINTS
9. Source of NEPA Document Data:
10. Baseline Conditions: Year 1968
    COMPREHENSIVE PLAN
11. Predicted for end of planning period: Year
    NO SIGNIFICANT IMPACT

12. Predicted for current year: Year 1984

NO SIGNIFICANT IMPACT

13. Actual current conditions:

NO IMPACT

14. Data Base: 1968 COMPREHENSIVE PLAN

15. Summary: (Code 09)

NO CHANGES IN LAND USE PLANS

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: HH 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST
CHICAGO, ILLINOIS 60604

15 DEC 1976

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements (EIS), and environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: City of Eau Claire, Wisconsin

Planning Area: Cities of Eau Claire, Altoona, and Chippewa Falls, Wisconsin

Proposed Project(s): Intercepting sewer and a secondary sewage treatment plant.

Estimated Project Cost: step 2 - $1,000,000
step 3 - $12,000,000

Potential Agency Financial Share: step 2 - $750,000
step 3 - $9,000,000

The review process has shown that significant environmental impacts which would warrant preparation of an EIS will not result from the proposed action. Any significant adverse impacts have been either eliminated by making changes in the project or resolved through mitigative measures. Consequently, a preliminary decision not to prepare an EIS has been made. This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Kent Fuller, Chief
Planning Branch

PROJECT SUMMARY

1. Project Location - See attached map

2. Purpose of Project:
The construction of a new secondary treatment plant, intercepting sewer, and appurtenances in order to eliminate the existing primary plant and bypassing of raw sewage.

3. Nature and Extent of Land Use Changes:
Land use changes will not be significantly affected by the construction of this project since development in the area will be dictated by other constraints.

4. Major Primary and Secondary Impacts of the Project on the Environment:
Primary impacts are those normally related to construction such as traffic disruption. Secondary impacts should be minimal because development should not be accelerated by the project.

APPENDIX D

DATA BASE FOR PROTOTYPE REPORT EVALUATION FOR TWO COMPLETED NEPA DOCUMENTS

APPENDIX D-1

ST. CLOUD CASE STUDY

Evaluation Form

1. Project Name. ST CLOUD PAM INTERCEPTOR

2. Needs(Facility) No. - NPDES No.

Grant No. 270807011

3. Date of Document: Year 1975 Month 08 Day 07

4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☑ e. Negative Dec. ☑ f. FNSI ☐

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: ST CLOUD MN

--N--W --N--W

--N--W --N--W

--N--W --N--W

6. Issue: BIOTA Parameter: TERRESTRIAL BIOTA

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

TURF AND TREES PLANTED AFTER CONSTRUCTION SHOULD BRING TURF AND TREES BACK TO ORIGINAL SITUATION

9. Source of NEPA Document Data: -

10. Baseline Conditions: Year 1975

11. Predicted for end of planning period: Year 1975

TURF AND TREE LOSS SHOULD BE UNDETECTABLE BY END OF PLANNING PERIOD

12. Predicted for current year: Year 1984

TURF SHOULD BE REPLACED. 3" CALIPER TREES PLANTED

13. Actual current conditions:

TURF REPLACED. 3" CALIPER TREES REPLACED

14. Data Base:

15. Summary: (Code)

REVEGETATION COMPLETED. TREES AND TURF TAKING HOLD

16. Regulations in Effect:

A. Baseline: 40CFR6

Today: 40CFR6, 40CFR150.0

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: MCP 18. Date of Review: Year 1984 Month 01 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

12. Predicted for Current Year: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Same as 11

13. Actual Current Conditions: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Not available to edit/review study team

14. Data Base:

15. Summary: (Code 00) (limited to 360 alpha-numeric and blank character spaces)

Data proposed available but not obtained by the original study team or the edit/review study team

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

12. Predicted for Current Year: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Slight development

13. Actual Current Conditions: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Not available to edit/review study team

14. Data Base:

15. Summary: (Code 00) (limited to 360 alpha-numeric and blank character spaces)

Data presumed available but not obtained by original study team

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

12. Predicted for current year: Year 1984

STREET SHOULD BE IN GOOD CONDITION

13. Actual current conditions:

REBUILT STREETS/CURB AND GUTTER IN BETTER CONDITION THAN SURROUNDING AREA

14. Data Base: SITE VISIT

15. Summary: (Code)

STREET IN BETTER CONDITION AFTER REPLACEMENT

16. Regulations in Effect:

A. Baseline: 40CFR6

Today: 40CFR6, 40CFR15010

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: MCA 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

Evaluation Form

1. Project Name. SIT CLOUD PAN / INTERCEPTOR

2. Needs(Facility) No. — NPDES No.

Grant No. 270801701 /

3. Date of Document: Year 1975 Month 08 Day 07

4. Type of Document: a. EIS ☐ b. EA ☐ c. EID ☐ d. Facilities Plan ☑ e. Negative Dec. ☑ f. FNSI ☐

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: ST CLOUD MN

N

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6. Issue: INTERRELAT Parameter: PUBLIC FACILITIES

7. Type of Impact: ✓ (1 = Quantiative) (2 = Qualitative)

8. Prediction:

STREETS WILL BE LEFT IN A GOOD CONDITION AS BEFORE CONSTRUCTION

9. Source of NEPA Document Data: —

10. Baseline Conditions: Year 1975

STREETS RESTORED TO ORIGINAL CONDITION

11. Predicted for end of planning period: Year 1995

CONSTRUCTION SHOULD BE UNDETECTABLE

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST
CHICAGO, ILLINOIS 60604

SEP 6 1977

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS AND CITIZENS:

In accordance with the procedures for the preparation of environmental impact statements, an environmental review has been performed on the proposed EPA action identified below. A summary of the project and its major impacts and a location map are attached.

Name of Applicant: City of St. Cloud, Minnesota

Planning Area: Corporate limits of the Cities of St. Cloud, Waite Park, Sauk Rapids, Sartell, St. Joseph, and St. Augusta and surrounding areas. All or parts of St. Cloud, St. Joseph, St. Wendel, St. Augusta, Minden, Haven, Sauk Rapids, and Le Sauk Township.
Proposed Project(s): Construction of a sanitary interceptor sewer to relieve combined sewer overflows to the Mississippi River. Location of sanitary interceptor sewer is shown on enclosed map.
Estimated Project Cost: Step 2: $106,000
Step 3: 4.4 Million

Potential Agency Financial Share: Step 2: $80,000
Step 3: 3.3 Million

The review process did not indicate that significant environmental impacts would result from the proposed action. Any significant adverse impact were eliminated by making changes in the project. Consequently, a preliminary decision not to prepare an EIS has been made.

This action is taken on the basis of a careful review of the facilities plan, including the environmental assessment, and other supporting data, which are on file in this office with the environmental impact appraisal and are available for public scrutiny upon request. Copies of the environmental impact appraisal will be sent upon request.

Comments supporting or disagreeing with this decision may be submitted for consideration by EPA. After evaluating the comments received, the Agency will make a final decision; however, no administrative action will be taken on the facilities plan and/or project for at least fifteen (15) working days from the date of this notice.

Sincerely yours,

Harlan D. Hirt

Harlan D. Hirt
Chief, Planning Branch

PROJECT SUMMARY

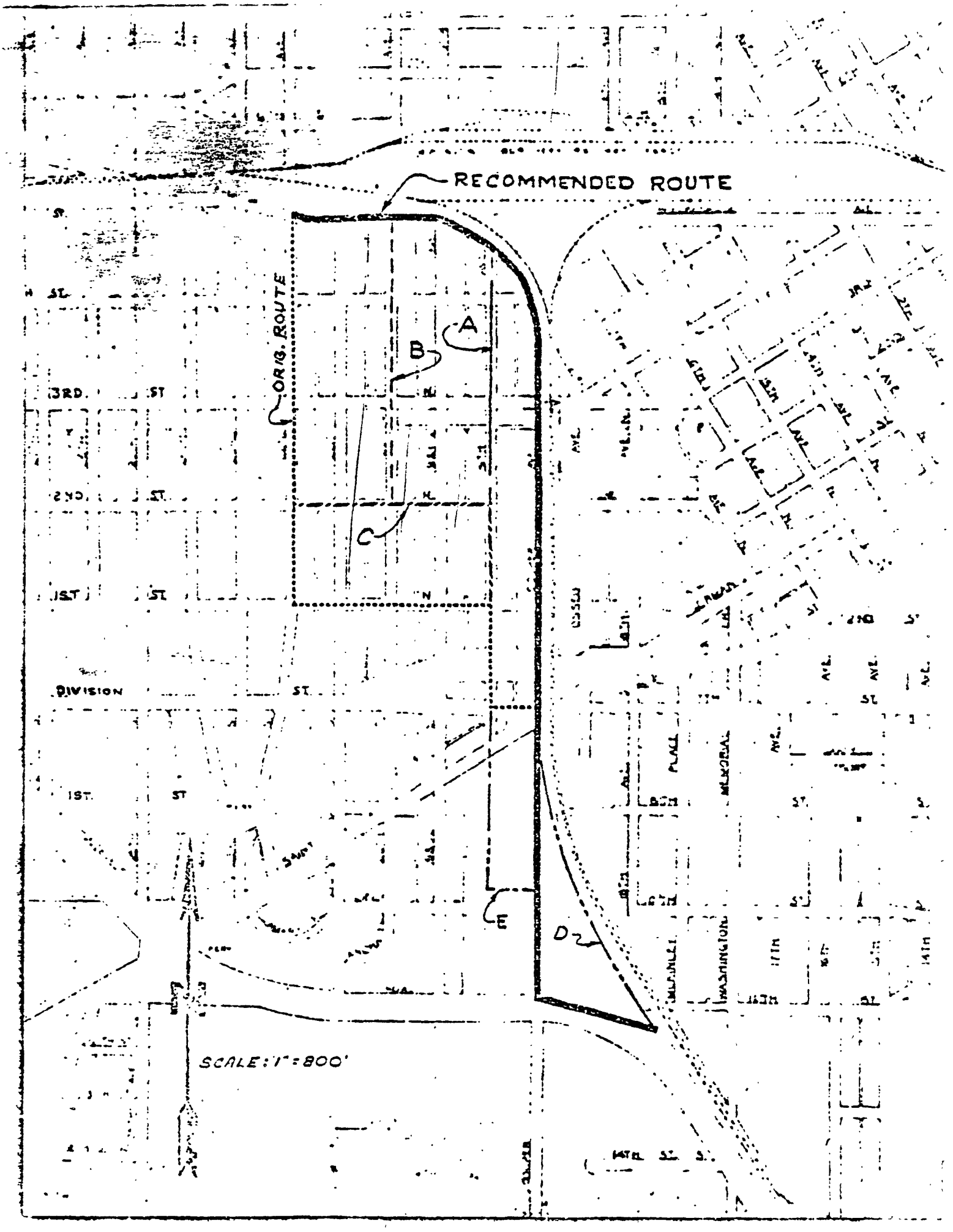
1. Project Location - See attached map

2. Purpose of Project: Construction of a sanitary interceptor sewer that will relieve raw sewage discharges to the Mississippi River and will reduce to the amount of clear water conveyed and treated at the wastewater treatment plant. Separation of combined sanitary and storm sewers will be undertaken at a later date at local expenses.

3. Nature and Extent of Land Use Changes: The project is expected to only slightly stimulate land development in the service area. This will occur through the provision of adequate interceptor and trunk capacity to sparsely developed areas. Land use changes will also occur along the route of the interceptor in the form of tree removal.

4. Major Primary and Secondary Impacts of the Project on the Environment:

Improved water quality in the Mississippi River and reduce wastewater costs. Tree removal along the route of the interceptor. This has been minimized by selecting an alternative interceptor route with a majority of American Elm trees whose longevity is limited by the Dutch Elm Disease. All trees removed will be replaced by minimum 2 1/2" diameter stock on a one-for-one basis.


RECOMMENDED ROUTE
ORIG. ROUTE
A
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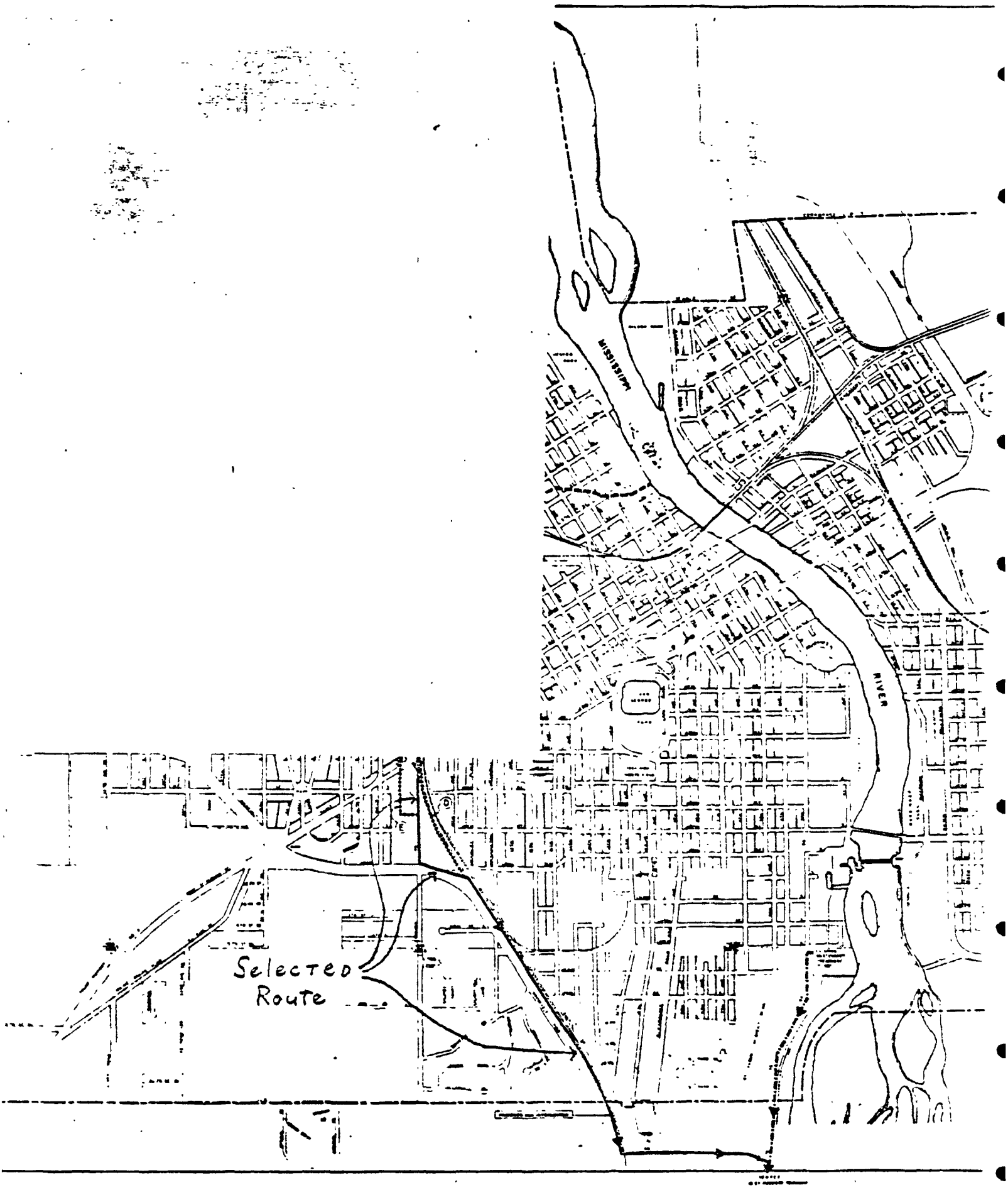
3RD. ST
2ND. ST
1ST ST
DIVISION ST.
1ST. ST
SCALE: 1" = 800'


MISSISSIPPI
RIVER
Selected
Route

APPENDIX D-2

BLOOMINGTON EIS CASE STUDY

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C180560

3. Date of Document: Year 1976 Month 08 Day __

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

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6. Issue: BIOTA Parameter: TERRESTRIAL

7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

Minimal impact with mitigation

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year 1975 (limited to 288 alpha-numeric and blank character spaces)

Native plant species along interceptor route

11. Predicted for end of planning period: Year 1996 (limited to 288 alpha-numeric and blank character spaces)

Revegetation with access

12. Predicted for Current Year: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Revegetation with access

13. Actual Current Conditions: Year 1984 (limited to 288 alpha-numeric and blank character spaces)

Revegetation complete, plants were reestablished within one year

14. Data Base: RICHARD PEOPLES - TELECON

15. Summary: (Code 11) (limited to 360 alpha-numeric and blank character spaces)

Impact predicted accurately

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C180560

3. Date of Document: Year 1976 Month 08 Day ___

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

___ ___ ___ N- ___ ___ ___ W ___ ___ ___ N- ___ ___ ___ W

___ ___ ___ N- ___ ___ ___ W ___ ___ ___ N- ___ ___ ___ W

___ ___ ___ N- ___ ___ ___ W ___ ___ ___ N- ___ ___ ___ W

6. Issue: WATER QUAL Parameter: SILTATION

7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

Minimal short-term impact if specified mitigation is employed

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year 1975 (limited to 288 alpha-numeric and blank character spaces)

No construction of pipes accross stream, No development at Dillman Road site

11. Predicted for end of planning period: Year 1996 (limited to 288 alpha-numeric and blank character spaces)

No measurable impact

12. Predicted for Current Year: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

No measurable impact

13. Actual Current Conditions: Year 1984 (limited to 288 alpha-numeric and blank character spaces)

No measurable or observed siltation. Mitigation carried out using diversion dikes. Stream restored to original condition following interceptor construction. Mitigation at Billman Road site used including sedimentation basin during heavy rainfall.

14. Data Base: RICHARD PEOPLES - TELECON

15. Summary: (Code +11) (limited to 360 alpha-numeric and blank character spaces)

Impact predicted accurately, mitigation employed

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

Evaluation Form

1. Project Name. SOUTH BLOOMINGTON/LAKE MONROE

2. Needs(Facility) No. 1820200011 NPDES No. —

Grant No. 18056ON01/01

3. Date of Document: Year 1976 Month 08 Day —

4. Type of Document: a. EIS ✓ b. EA ___ c. EID ___ d. Facilities Plan ___ e. Negative Dec. ___ f. FNSI ___

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: BLOOMINGTON

M/MONROE COUNTY/N

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___-___-___N--___-___-___W ___-___-___N--___-___-___W

6. Issue: PHYS ENV Parameter: SILTATION

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

HEAVY SILTATION OF THE CREEK DURING CONSTRUCTION WOULD WORSEN THE BAD SILTATION PROBLEM. MITIGATING MEASURES REQUIRED TO MINIMIZE IMPACTS

9. Source of NEPA Document Data: NOT GIVEN

10. Baseline Conditions: Year 1976

BAD SILTATION PROBLEM

11. Predicted for end of planning period: Year 1996

MILL RECOVER OVER PROJECT LIFE

12. Predicted for current year: Year 1984

RECOVERING FROM SILTATION PROBLEM

13. Actual current conditions:

NO SILTATION PROBLEM PRESENT DOWN STREAM OF CONSTRUCTION SITE

14. Data Base: FIELD TRIP

15. Summary: (Code)

SILTATION PROBLEM NOT CURRENTLY PRESENT BECAUSE OF MITIGATING MEASURES BY CONSTRUCTION CONTRACTOR AND REVEGETATION

16. Regulations in Effect:

A. Baseline: 40CFR6

Today: 40CFR6, 40CFR1500

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: VHB 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C180560

3. Date of Document: Year 1976 Month 08 Day ___

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

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6. Issue: WATER QUAL Parameter: EFFLUENT LIMITS

7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

Plant would meet effluent limits

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year ____ (limited to 288 alpha-numeric and blank character spaces)

11. Predicted for end of planning period: Year 1996 (limited to 288 alpha-numeric and blank character spaces)

BOD - 5 mg/l Plant would meet effluent limits
SS - 5 mg/l
TP - 1 mg/l
NH_3-N - 1.5 mg/l summer
3.0 mg/l winter

12. Predicted for Current Year: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Plant would meet effluent limits

13. Actual Current Conditions: Year 1984 (limited to 288 alpha-numeric and blank character spaces)

Effluent Limits			Plant 1984 average
BOD -	10 mg/l		BOD - 3 mg/l
SS -	10 mg/l		SS - 1 mg/l
TP -	1.0 mg/l	May 1 - Oct 31	
NH3-N -	2.0 mg/l	May 1 - Nov 30	
	5.0 mg/l	Dec 1 - April 30	
PCB -	0.1 ng/l		
FC -	200/100ml	April 1 - Oct 31	

14. Data Base: PAUL VERMAATEN & RICHARD PEOPLES

15. Summary: (Code 41) (limited to 360 alpha-numeric and blank character spaces)

Downgrade of effluent limitations due to reevaluation of dilution available at Dillman Rd. site.

Accurate Prediction

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C18056 0

3. Date of Document: Year 1976 Month 08 Day __

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

__ __ __ N- __ __ __ W __ __ __ N- __ __ __ W

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__ __ __ N- __ __ __ W __ __ __ N- __ __ __ W

6. Issue: WATER QUAL Parameter: NONE SPECIFIED

7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

Long-term improvement in water quality

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year 1975 (limited to 288 alpha-numeric and blank character spaces)

Winston Thomas plant discharge operational, odors, turbidity, nuisance algae growth.

11. Predicted for end of planning period: Year 1996 (limited to 288 alpha-numeric and blank character spaces)

Improvement in water quality

12. Predicted for Current Year: Year 1984 (limited to 288 alpha-numeric and blank character spaces)

Same as 11

13. Actual Current Conditions: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Observable improvement in terms of odor, turbidity, algae growth downstream of old plant discharge. Measurable enhancement of water quality between upstream and downstream of current discharge.

14. Data Base: RICHARD PEOPLES

15. Summary: (Code +1) (limited to 360 alpha-numeric and blank character spaces)

Impact predicted accurately

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: DCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

Evaluation Form

1. Project Name. SOUTH BLOOMINGTON/LAKE MONROE

2. Needs(Facility) No. 1820200011 NPDES No. _____

   Grant No. 180560N01/0

3. Date of Document: Year 1976 Month 08 Day --

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ] e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: BLOOMINGTON/MONROE COUNTY/IN

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6. Issue: WATER QUAL Parameter: BOD

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

   SIGNIFICANT IMPROVEMENT IN CLEAR CREEK

9. Source of NEPA Document Data: NOTIFIEN

10. Baseline Conditions: Year 1976

    NONE PROVIDED IN EIS. 1980. AVE. BOD LEVEL IN STREAM ABOVE AND BELOW OLD PLANT WERE 5.8 AND 15.0 RESPECTIVELY FOR JAN AND 11.0 AND 24.0 IN FEBURARY.

11. Predicted for end of planning period: Year 1996

    IMPROVEMENT OVER STREAM QUALITY PRIOR TO BRINGING PLANT ON LINE

12. Predicted for current year: Year 1984

AVE BOD LEVEL IN STREAM ABOVE AND BELOW NEW PLANT SHOULD BE LESS THAN THE LEVELS IN JAN/FEB 1980.

13. Actual current conditions:

AVE BOD IN STREAM FOR 1984 ABOVE AND BELOW NEW PLANT WERE AS FOLLOWS: JAN ABOVE 5.8/BELOW 7.7; FEB ABOVE 4.5/BELOW 3.9

14. Data Base: PLANT RECORDS

15. Summary: (Code)

AVAILABLE DATA SUGGESTS MARKED IMPROVEMENT

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: 18. Date of Review: Year Month Day

19. Title of Narrative Report:

20. Location of Narrative Report:

12. Predicted for current year: Year 1984

ABOVE BOD LEVEL IN STREAM ABOVE AND BELOW NEW PLANT SHOULD BE LESS THAN THE LEVELS IN JAN/FEB 1980.

13. Actual current conditions:

ABOVE BOD IN STREAM FOR 1984 ABOVE AND BELOW NEW PLANT WERE AS FOLLOWS: JAN ABOVE 5.8/BELOW 7.7; FEB ABOVE 4.5/BELOW 3.9

14. Data Base: PLANT RECORDS

15. Summary: (Code)

AVAILABLE DATA SUGGESTS MARKED IMPROVEMENT

16. Regulations in Effect:

A.Baseline:

Today:

B.Baseline:

Today:

C.Baseline:

Today:

17. Reviewer: 18. Date of Review: Year Month Day

19. Title of Narrative Report:

20. Location of Narrative Report:

Evaluation Form

1. Project Name. SOUTH BLOOMINGTON/LAKE MONROE

2. Needs(Facility) No. 1820200001 NPDES No. _____

   Grant No. 180560N01/0

3. Date of Document: Year 1976 Month 08 Day --

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ] e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: BLOOMINGTON

   N/MONROE COUNTY/IN

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   ___-___-___N--___-___-___W ___-___-___N--___-___-___W

   ___-___-___N--___-___-___W ___-___-___N--___-___-___W

6. Issue: WATER QUAL Parameter: BOD

7. Type of Impact: 2 (1=Quantiative) (2=Qualitative)

8. Prediction:

   SIGNIFICANT IMPROVEMENT IN CLEAR CREEK

9. Source of NEPA Document Data: NOTIGUEN

10. Baseline Conditions: Year 1976

    NONE PROVIDED IN EIS. 1980. AVE. BOD LEVEL IN STREAM ABOVE AND BELOW OLD PLANT WERE 5.8 AND 15.0 RESPECTIVELY FOR JAN AND 11.0 AND 24.0 IN FEBURARY.

11. Predicted for end of planning period: Year 1996

    IMPROVEMENT OVER STREAM QUALITY PRIOR TO BRINGING PLANT ON LINE

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C18056 0

3. Date of Document: Year 1976 Month 08 Day ___

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

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___ ___ ___ N- ___ ___ ___ W ___ ___ ___ N- ___ ___ ___ W

6. Issue: OTHER Parameter: VISUAL

7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

Minimal long-term impact

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year 1975 (limited to 288 alpha-numeric and blank character spaces)

No development at Dillman Rd site

11. Predicted for end of planning period: Year 1996 (limited to 288 alpha-numeric and blank character spaces)

No significant visual impacts

12. Predicted for Current Year: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Same as 11

13. Actual Current Conditions: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

No significant visual impact. Plant landscaped with pines and shrubs. No residential views on plant.

14. Data Base: RICHARD PEDDICKS TELECON

15. Summary: (Code +11) (limited to 360 alpha-numeric and blank character spaces)

Impact predicted accurately

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C180560

3. Date of Document: Year 1976 Month 08 Day ___

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

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6. Issue: OTHER Parameter: TRAFFIC

7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

No significant impact

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year 1976 (limited to 288 alpha-numeric and blank character spaces)

No plant related traffic at Dillman Rd site

11. Predicted for end of planning period: Year 1996 (limited to 288 alpha-numeric and blank character spaces)

No significant traffic impact

12. Predicted for Current Year: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

No significant traffic impact

13. Actual Current Conditions: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

No change in traffic patterns or congestion

14. Data Base: RICHARD PEDRKES

15. Summary: (Code +1) (limited to 360 alpha-numeric and blank character spaces)

Impact predicted accurately

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C180560

3. Date of Document: Year 1976 Month 09 Day ___

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

N- W N- W N- W N- W N- W N- W

6. Issue: OTHER Parameter: RECREATION

7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

Preserved recreational opportunity on Clear Creek

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year 1976 (limited to 288 alpha-numeric and blank character spaces)

Some canoeing when flows are adequate

11. Predicted for end of planning period: Year 1996 (limited to 288 alpha-numeric and blank character spaces)

Opportunity for canoeing preserved

12. Predicted for Current Year: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Same as 11

13. Actual Current Conditions: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Flows in creek preserved, recreational opportunity preserved and enhanced (improved water quality) No evidence that creek is actually used significantly for canoeing or other recreation.

14. Data Base: RICHARD PEOPLES TELECON

15. Summary: (Code 11) (limited to 360 alpha-numeric and blank character spaces)

Impact predicted accurately

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C180560

3. Date of Document: Year 1976 Month 08 Day __

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

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6. Issue: OTHER Parameter: GRANT CONDITION

7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

Applicant shall identify toxic chlorinated compounds possibly formed during disinfection. Mitigation required if concentrations exceed federal or state standards

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year 1975 (limited to 288 alpha-numeric and blank character spaces)

Possible chlorinated organics formation in Winston Thomas plant effluent

11. Predicted for end of planning period: Year 1996 (limited to 288 alpha-numeric and blank character spaces)

N/A

12. Predicted for Current Year: Year (limited to 288 alpha-numeric and blank character spaces)

13. Actual Current Conditions: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Priority pollutant scans were done. No significant increase due to chlorination.

14. Data Base:

15. Summary: (Code +1) (limited to 360 alpha-numeric and blank character spaces)

Permit Condition fulfilled

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JKW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C180560

3. Date of Document: Year 1976 Month 08 Day ___

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

			N-				W						N-				W						
			N-				W						N-				W						
			N-				W						N-				W						

6. Issue: OTHER Parameter: GRANT CONDITION

7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

Applicant shall develop sludge disposal plan

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year 1976 (limited to 288 alpha-numeric and blank character spaces)

No sludge disposal plan

11. Predicted for end of planning period: Year 1976 (limited to 288 alpha-numeric and blank character spaces)

Sludge disposal plan implemented.

12. Predicted for Current Year: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Sludge disposal plan implemented

13. Actual Current Conditions: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Sludge disposal plan completed 1983. Will use sludge drying beds and landfill. Interim storage in on-site lagoons. Land application dropped due to public opposition.

14. Data Base: RICHARD PEOPLES

15. Summary: (Code +1) (limited to 360 alpha-numeric and blank character spaces)

Grant condition fulfilled.

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C180560

3. Date of Document: Year 1986 Month 08 Day __

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

N- W N- W N- W N- W N- W N- W

6. Issue: OTHER Parameter: UNANTICIPATED

7. Type of Impact: [ ] (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

N/A

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year ____ (limited to 288 alpha-numeric and blank character spaces)

11. Predicted for end of planning period: Year ____ (limited to 288 alpha-numeric and blank character spaces)

12. Predicted for Current Year: Year ☐☐☐☐ (limited to 288 alpha-numeric and blank character spaces)

13. Actual Current Conditions: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

City water was provided to the community of
Clear Creek, IN (15-20 homes) as partial payment for
interceptor and water line easements through the area.

14. Data Base:

15. Summary: (Code ☐☐) (limited to 360 alpha-numeric and blank character spaces)

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day ☐☐

19. Title of Narrative Report:

20. Location of Narrative Report:

EVALUATION FORM

1. Project Name SOUTH BLOOMINGTON/LAKE MONROE

2. Needs (Facility No.) _____ NPDES No. _____

Grant No. C18056 0

3. Date of Document: Year 1976 Month 08 Day ___

4. Type of Document: a. EIS [X] b. EA [ ] c. EID [ ] d. Facilities Plan [ ]

e. Negative Dec. [ ] f. FNSI [ ]

5. Location: (Latitude/Longitude)(degree/minute/second) or Political Jurisdiction:

MONROE COUNTY IN

___ ___ ___ N- ___ ___ ___ W ___ ___ ___ N- ___ ___ ___ W

___ ___ ___ N- ___ ___ ___ W ___ ___ ___ N- ___ ___ ___ W

___ ___ ___ N- ___ ___ ___ W ___ ___ ___ N- ___ ___ ___ W

6. Issue: OTHER Parameter: UNANTICIPATED

7. Type of Impact: 2 (1 = Quantitative) (2 = Qualitative)

8. Prediction: (limited to 288 alpha-numeric and blank character spaces)

N/A

9. Source of NEPA Document Data: _____

10. Baseline Conditions: Year ____ (limited to 288 alpha-numeric and blank character spaces)

11. Predicted for end of planning period: Year ____ (limited to 288 alpha-numeric and blank character spaces)

12. Predicted for Current Year: Year (limited to 288 alpha-numeric and blank character spaces)

13. Actual Current Conditions: Year 1985 (limited to 288 alpha-numeric and blank character spaces)

Blasting by the contractor resulted in damage to a house foundation which had to be rebuilt. Damage covered by contractors insurance

14. Data Base:

15. Summary: (Code) (limited to 360 alpha-numeric and blank character spaces)

16. Regulations in Effect:

A. Baseline:

Today:

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: JCW 18. Date of Review: Year 1985 Month 03 Day

19. Title of Narrative Report:

20. Location of Narrative Report:

Evaluation Form

1. Project Name. SOUTH BLOOMINGTON/LAKE MONROE

2. Needs(Facility) No. 18202001 NPDES No.

Grant No. 180516 0M01/0

3. Date of Document: Year 1976 Month 08 Day --

4. Type of Document: a. EIS ☑ b. EA ☐ c. EID ☐ d. Facilities Plan ☐ e. Negative Dec. ☐ f. FNSI ☐

5. Location: (Latitude/Longitude) (deg-min-sec) or Political Jurisdiction: BLOOMINGTON

MONROE COUNTY IN

--- -- -- N-- --- -- -- W --- -- -- N-- --- -- -- W

--- -- -- N-- --- -- -- W --- -- -- N-- --- -- -- W

--- -- -- N-- --- -- -- W --- -- -- N-- --- -- -- W

6. Issue: SOCIOECON Parameter: INDUCED GROWTH

7. Type of Impact: ☑ (1 - Quantiative) (2 - Qualitative)

8. Prediction:

INDUCED GROWTH UNLIKELY, ALTHOUGH INCREASE IN SEASONAL HOUSING LIKELY

9. Source of NEPA Document Data: CONSULTANT HOUSE COUNT

10. Baseline Conditions: Year 1970

NOT PROVIDED

11. Predicted for end of planning period: Year 1996

6492 INCREASE IN LAKE MONROE HOUSING UNITS (CLEAR CREEK 3150; SALT CREEK 2245; POLK 1005)

12. Predicted for current year: Year 1984

28/6 INCREASE IN LAKE MONROE HOUSING UNITS (CLEAR CREEK 1386; SALT CREEK 918; PICK 442

13. Actual current conditions:

700 UNIT INCREASE IN HOUSING UNITS AROUND LAKE MONROE (UNDER CONSTRUCTION)

14. Data Base: INTERVIEW - DOCOMPS BLOOMINGTON

15. Summary: (Code)

LEVEL OF LAKE MONROE DEVELOPMENT BELOW PREDICTION; LIKELY DUE TO ECONOMY

16. Regulations in Effect:

A. Baseline: 40CFR6

Today: 40CFR6; 40CFR1500

B. Baseline:

Today:

C. Baseline:

Today:

17. Reviewer: WHB 18. Date of Review: Year 1984 Month 07 Day

19. Title of Narrative Report:

20. Location of Narrative Report: