

THE ROUGE RIVER PROJECT
A WORLD CLASS EFFORT



BRINGING OUR RIVER BACK TO LIFE

Rouge River National Wet Weather Demonstration Project

Wayne County, Michigan

TASK PRODUCT MEMORANDUM
Data Receipt and Delivery Procedures
Data Collection Work Plan No.4, Task #1

RPO-DAT-TPM22.00

February 1995

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Rouge River National Wet Weather Demonstration Project

MISSION STATEMENT

The mission of the Rouge River National Wet Weather Demonstration Project is to restore the water quality in the Rouge River as necessary to:

- provide a safe and healthy environment for ourselves and future generations,
- protect downriver water resources such as the Detroit River and Lake Erie, and
- re-establish a healthy and diverse ecosystem within the Rouge River Watershed.

This will be accomplished through the development, implementation, and financial integration of a technical, social, and institutional framework leading to cost efficient, and innovative, Watershed based solutions to control the wet weather problems in the Rouge River Watershed.

ABSTRACT

The Rouge River National Wet Weather Demonstration Project (Rouge Project) will receive, store, organize, report and deliver on a wide variety of data during the sampling collection projects. This document will describe the levels of availability and who will have access to the data. The document will also describe the data flow through various steps, who handles the data and how the data distribution process works. The last section will describe the procedures required for distribution and delivery of the data.

PREFACE

The Rouge River has historically suffered and continues to suffer from the combined stress of pollutant loadings from various sources. The vast majority of continuous point sources have been eliminated through the issuance and enforcement of National Pollutant Discharge Elimination System (NPDES) permits for municipal and industrial dischargers. Yet, as established in the Rouge River Remedial Action Plan (RAP), the river remains polluted primarily because of sources associated with wet weather flow.

The Rouge River National Wet Weather Demonstration Project (Rouge Project) is intended to evaluate each of the various sources of wet weather pollution; implement alternative remedial measures; investigate wet weather waste load allocations; establish associated pollutant load reductions; examine the financial and institutional impediments to wet weather pollution control; and recommend a plan and procedure for watershed-wide pollution control which is "implementable" in the Rouge and can be readily transferred to similar urban watersheds throughout the country.

The effort is not being conducted in isolation. The Rouge RAP provides a baseline from which Rouge Project efforts have begun. In fact, the Rouge Project can be viewed as the key component of the initial implementation of the RAP. In addition, ongoing regulatory efforts aimed at controlling Combined Sewer Overflow (CSO) discharge have also been integrated into the Rouge Project and all construction facilities will be in accordance to NPDES permits.

It is widely recognized, and reinforced by RAP recommendations, that CSO control by itself will not be sufficient to restore water quality to acceptable levels in the Rouge River and other similar urban rivers. The project has established a watershed-wide concept as its focus. Within the Rouge River Watershed, a range of pollution sources have been identified. They include: traditional urban runoff, illicit connections to drainage facilities, abandoned dumps within the river flood plain, wet fall and dry fall air deposition, and contaminated sediments within the river channel and impounded lakes.

The Rouge Project has incorporated efforts to develop analysis tools, organize existing and future data, conduct field surveys, collect and analyze water quality samples, develop and implement water quality models, design and test structural and nonstructural best management practices (BMPs), and establish loadings from nontraditional wet weather sources. Additionally, it includes components that will involve watershed residents in pollution control planning, and will study the institutional structure and financial capabilities of those entities responsible for long term implementation of the recommended watershed plan.

To efficiently manage an effort with diverse objectives, the project has been divided into ten program elements. Each of these has a specifically defined technical or operational purpose. Within each of these elements, work plans are developed to define specific activities to be performed as part of the project. These work plans define the Tasks and level of effort.

The program elements that have been established are as follows:

- Geographic Information System (GIS) and Mapping
- Data Collection and Management
- Sampling and Analytical Program
- Modeling and Decision Support System (DSS)
- Nonpoint Source Best Management Practices (BMPs)
- Combined Sewer Overflow (CSO) Design, Build and Test Facilities
- Value Engineering
- Public Information and Involvement
- Financial and Institutional
- Project Management, Coordination and Reporting

This document has been generated under the Data Collection and Management Program Element. Its purpose is to present the definitions and approach to be used in providing data collected as part of the Rouge project to various types of users. The first section will define the level of data available. The second section will describe the people involved in the data handling, analysis and management processes at the Rouge Program Office. Also the section will have a very brief description of a typical data flow and the RPO staff associated with its key points. The last section will describe the procedures required for distribution and delivery of the data.

INTRODUCTION

The Rouge River National Wet Weather Demonstration Project (Rouge Project) will receive, store, organize, report and deliver on a wide variety of data during the sampling collection projects. This document will describe the levels of availability and who will have access to the data. The document will also describe the data flow through various steps, who handles the data and how the data distribution process works. The last section will describe the procedures required for distribution and delivery of the data.

LEVELS OF DATA

ALL of the data collected will go through three levels of condition - 1) Raw; 2) Preliminary; and 3) Final. Each of these levels of data conditions are described below:

- **Raw Data** - Data is considered to be raw data as it is collected in the field and as it leaves the laboratory. This data has undergone only MINIMAL quality assurance/quality control (QA/QC) checks by the team responsible for collecting the data. This data is only available for Wayne County Rouge Program Office (RPO) internal review.
- **Preliminary Data** - Raw data is examined and flagged for a variety of reasons, by the team responsible for collecting the data. This flagged data is considered preliminary and still has some additional QA/QC steps to complete BUT is available in graphic and report formats to United States Environmental Protection Agency (EPA) and Michigan Department of Natural Resources (MDNR) with any relevant flags which have been assigned. Additional flags or corrections (i.e. Daylight Savings Time) may be assigned to preliminary data prior to final.
- **Final Data** - Once the preliminary data has been final QA/QC'd (all QA/QC steps have been completed and signed off on), then the data is considered final. The team responsible for obtaining the data in the field is required to notify the Data Management Team Leader in writing. The written notification will state what data is now considered final. Final data is available to anyone who asks for it and will be provided with all appropriate flags assigned by the RPO QA/QC Teams. REMEMBER - For data to be identified as final, it MUST have been OK'd by the QA/QC program.

DATA FLOW PROCESS

As described in more detail in the Data Management and Evaluation Guide, Wayne County Rouge Program Office (RPO) sampling data will flow through the following steps:

- Data is collected in the field by a team and undergoes initial QA/QC. The data is considered RAW data at this point.
- Eventually, all data will come into the RPO to the attention of the person assigned to the sampling effort as the Data Handler. Laboratory data, for instance, will take more time to arrive than rain data. The data is considered PRELIMINARY data at this point.
- The Data Handler will notify the Data Management Team Leader that the data has gone through the initial QA/QC and is available to the Database Manager or the Database Programmer for loading into the RPO ORACLE database. A data set name will be assigned to the data for future data retrieval.
- The Data Handler or Sampling Team member gives the original disks, a backup of the original disks and a document detailing the data to the Database Manager. Upon receipt of the data the Database Manager completes the Data Transfer Form (see *Appendix*). After the form is complete it is placed in a notebook called Data Transfer Forms. If not already assigned a disk number is given for every disk received.
- The Database Manager will use one of the developed batch files to compress the data and place it in g:\databak directory on the NOVELL server. (See *Appendix* for description and use of the batch files). A nightly server tape backup process will copy the data and store it on tape.

The backup disks are placed in the disk storage cabinet for safe keeping. The disks are backed up again for offsite storage. These are sent out for long term storage and disaster recovery.

The original disks are sent along with a copy of the letter of transfer to the Database Programmer for uploading to the ORACLE Database. The Database Programmer will load the data, generate an exceptions report for data that does not meet certain criteria, and generate any plots or tables for the files and for review.

The Preliminary Data Report (PDR) for the data month will be produced and distributed with all the plots, tables, maps, and descriptions. The PDR will be developed in the first 10 days of the second month following the close of the data month. For example, for data month of APRIL the PDR will be available in early JUNE. For MAY - early JULY.

The Data Handler will ensure that all additional QA/QC steps are completed (and signed off on) including distribution of plots and tables to relevant personnel. The data is considered FINAL at this point.

The current people associated with each of the above mentioned titles as of November 1994, are as follows:

- **Data Handler** - Glenn Hummel (Baseline); Lou Regenmorter (Point Source and NPS); Fayek Zabaneh (Surrogate Basin); John O'Meara (Leachate); Joe Rathbun (Newburgh Lake); Joe Rathbun (Sediment Recon); Joe Rathbun (Special Studies).
- **Data Management Team Leader** - Charlie Bristol
- **Database Manager** - Les Reed
- **Database Programmer** - Victor Capton (ORACLE); Colleen Hughes (QPRO, SAS)
- **Data Analysis** - Khalil Atasi (All data); Mercer (Baseline, Point Source, Special Studies); Kelly Cave (NPS); Tom Heidtke (All data); Sue Morea (All Data); Quasabarth (SAM).

DISTRIBUTION OF DATA

Data available from the RPO can be easily retrieved. There are Data Summary notebooks which provide data summaries for each sampling site by month. These notebooks should be the first source of data. If more detailed data is required, then individual data reports and data disks can be generated as needed.

Final data from the Rouge Project will eventually be made available in three products / formats - 1) plots; 2) tables; and 3) digitally (on floppy disk). The Data Management Team will provide or assist in providing each of these data products. To provide any one of these products the following steps are required:

- When asked for copies of Rouge Project data use the standard information request form as designed and implemented by the Public Involvement Team (See Leslie Kusek, RPO) to document the request. When complete, the request is then sent to Wayne County for approval. The request form needs to contain background information on who is making the request, what organization they are with, etc. The form needs to be completed in specific detail so that persons working with the data can gather and present it in the correct quantity and format. A copy of the request needs to be provided, in person, to a member of the Data Management Team.
- Prior to delivery, contact is made with the persons that are to receive the data to verify that the data being sent is what they expected. Upon confirmation, Data Management will generate the requested information with an approval and cover letter from Wayne County to the appropriate persons. (Please refer

to the Data/Information Request memorandum from Noel Mullet for more details on completing requests, see *Appendix*.)

Eventually, as additional data management and access tools become available to the project staff, each individual staff person will be able to retrieve any data for their own use. A request form **MUST** be completed, however, for any data to be distributed to the general public.

SUMMARY / CONCLUSION

The Rouge Project will receive and then in turn deliver, to interested parties, a wide variety of data collected during and after the conclusion of the sampling projects. A structure has been developed to handle the levels of data (raw, preliminary and final) and a flow process is in place to make sure the appropriate actions are done QA/QC, data backup, loading and reporting. Also a controlled distribution procedure with an approval process is in place to insure that the requested information is appropriate for delivery.

APPENDIX

Data Management
Data Transfer Form

Description

Media

Type/format

Quantity

Received

From

By

Date received

Media Copied To

Disk No.

Backup Disk No.

Disk No.

Backup Disk No.

Comments

Delivered

To whom

County Delivery

Date delivered

To whom

DESCRIPTION AND USE OF THE BACKUP BATCH FILES

The Rouge project uses the following batch files to compress (zip) the sampling data files. The batch files are set to copy files from the B: drive to G:\databak. The procedure is similar in the following data sets. The data disk needs to have a disk number assigned to it. The Database Manager will do this prior to the procedure.

Continuous Data :

Use the contbak.bat. Place the sampling disk in the B: drive
Execute from G:\databak
G:\databak > contbak [disk no]
The result file on G:\databak is cont[disk no].zip
(The batch file contains : pkzip -u -ex -r -P -\$b cont%1 b:*.*)

Flow Data :

Use the flowbak.bat. Place the sampling disk in the B: drive
Execute from G:\databak
G:\databak > flowbak [disk no]
The result file on G:\databak is flow[disk no].zip
(The batch file contains : pkzip -u -ex -r -P -\$b flow%1 b:*.*)

Lab Data :

Use the labbak.bat. Place the sampling disk in the B: drive
Execute from G:\databak
G:\databak > labbak [disk no]
The result file on G:\databak is lab[disk no].zip
(The batch file contains : pkzip -u -ex -r -P -\$b lab%1 b:*.*)

Rain Data :

Use the rainbak.bat. Place the sampling disk in the B: drive
Execute from G:\databak
G:\databak > rainbak [disk no]
The result file on G:\databak is rain[disk no].zip
(The batch file contains : pkzip -u -ex -r -P -\$b rain%1 b:*.*)

QC Data :

Use the qcbak.bat. Place the sampling disk in the B: drive
Execute from G:\databak
G:\databak > qcbak [disk no]
The result file on G:\databak is qc[disk no].zip
(The batch file contains : pkzip -u -ex -r -P -\$b qc%1 b:*.*)

Wayne County Rouge Program Office (RPO)

MEMORANDUM

Date: March 2, 1995
To: Rouge Project Staff
From: Noel Mullett
Rouge Project Coordinator

Subject: EPA / MDNR Data and Information Request Procedures

The Rouge Project staff should provide information to all MDNR or EPA staff who request it under the following conditions:

1. If the data requests come directly from Matt Didier, EPA Region 5 and Roy Schrameck, MDNR-Livonia.
2. If the request is not directly from Matt Didier, EPA and Roy Schrameck, MDNR, then ask the requestor to put their request in writing through Matt or Roy.
 - Written requests are not mandatory - use discretion based upon MDNR / EPA staff familiarity with the project and the type of information requested.

Once the request is received the following steps are required:

- Evaluate the request as to its complexity and determine if the request is normal and relatively easy to comply with.
- Complete a Rouge Project Information Request Form (See L. Kusek).

If the request is a normal one:

- Complete the request and generate the requested copies of reports, tables, charts, plots, or digital files.
- Attach the request for a completed "red" form which is to be used to distribute all information to the EPA and MDNR.

If the request will require considerable amount of time and effort, please bring the request to Charlie Bristol, Deputy Director. The data request will be brought to the weekly Rouge Project Management meeting for review and approval.