City of LaPorte

CSO Long Term Control Plan

MALCOLM PIRNIE

June 2005

NIES

CSO LONG TERM CONTROL PLAN

CITY OF LAPORTE, INDIANA

Revised June 2005

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1.0 INTRODUCTION

1.1 GENERAL

The City of LaPorte, Indiana (City) has developed this Combined Sewer Overflow (CSO) Long-Term Control Plan in accordance with the requirements of state and federal law. The purpose of this Long-Term Control Plan (LTCP) is to identify controls that when implemented will ensure compliance with the technology and water quality based requirements of state and federal law.

The CSO LTCP was originally submitted to IDEM in July 2002. IDEM provided review comments in a letter to LaPorte dated January 14, 2004. The CSO LTCP was revised in response to IDEM's comments and resubmitted in August 2004. IDEM and LaPorte had several discussions regarding the August 2004 submittal, during which IDEM provided comments regarding the submittal. The CSO LTCP was further revised in response to IDEM's comments and resubmitted in May 2005.

The control alternative recommended by the City of LaPorte is "Alternative 3," which calls for the storage and treatment of combined storm and sanitary wastewater, with the goal of eliminating all CSO discharges. Specifically, LaPorte plans to increase the storage capacity of the existing CSO storage lagoon from its current capacity of 12.8 million gallons to approximately 31.5 million gallons, and to increase the return pump-back rate so that the CSO storage lagoon can be lowered more quickly after storm events.

1.2 POPULATION

The City of LaPorte is located in LaPorte County in northwest Indiana. LaPorte had a population of approximately 21,600 according to the 2000 census. If the 2000 census is compared with the census of 1990 (population, 21,507), the census of 1980 (population, 21,755) and the census of 1970 (population, 22,140), it is apparent that the City of LaPorte's population has been stable for the past 30 years.

1.3 WASTEWATER SYSTEM

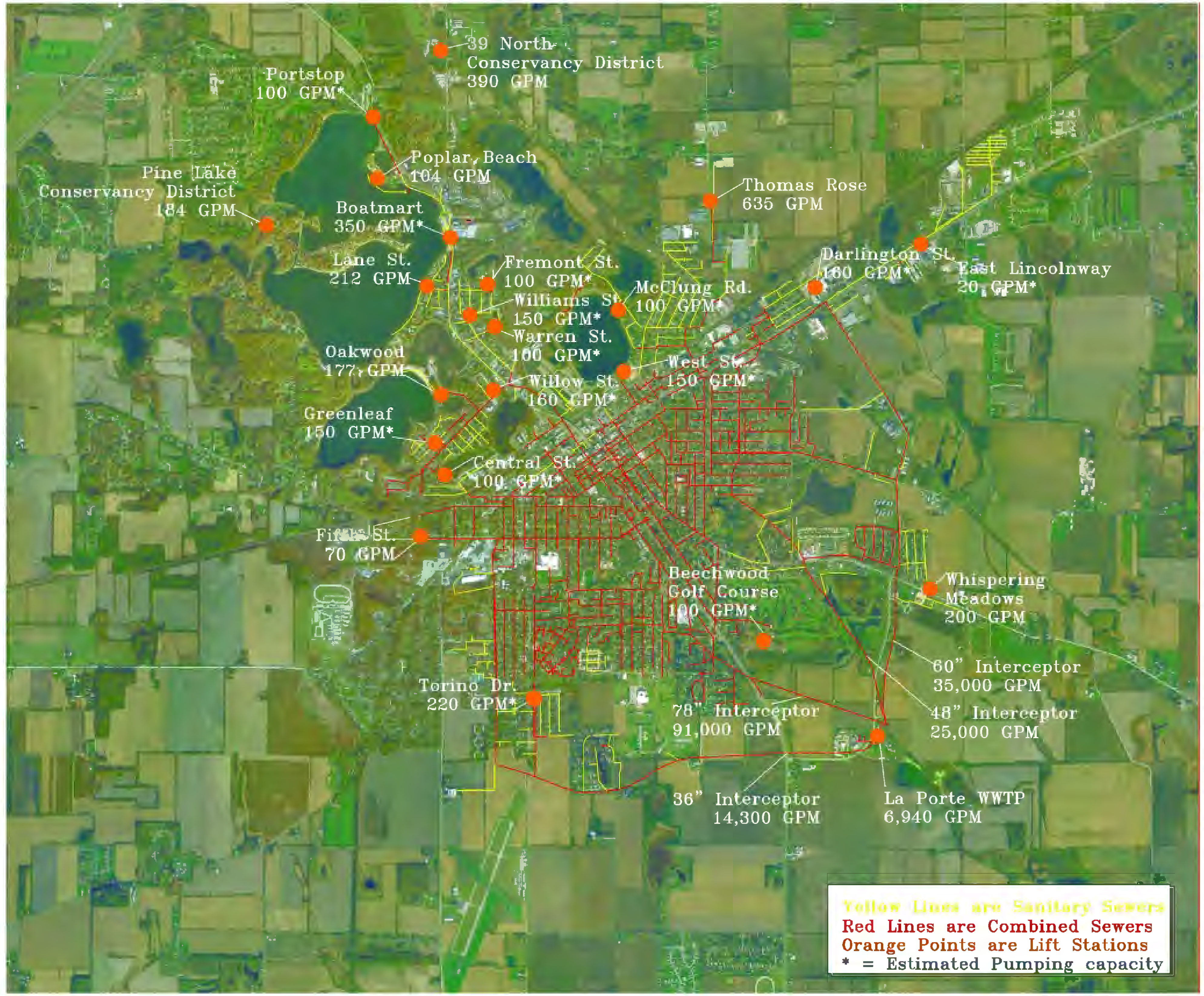
LaPorte's wastewater collection system consists of approximately 69 miles of combined sewers and 31 miles of sanitary sewers. Figure 1-1 is a map of the wastewater collection system.

The combined sewers cover an area of approximately 2,240 acres. Figure 1-2 is a map of LaPorte's 2000 census blocks. Comparing the year 2000 population by census block to the combined sewer area, LaPorte was able to determine that combined sewers serve about 16,658 residents, or 77 percent of the population. LaPorte has a single CSO discharge point, identified in NPDES Permit IN0025577 as Outfall 002, which is located at the south eastern edge of a 17 acre CSO storage lagoon (Latitude 41 deg 35 min 07 sec north, Longitude 86 deg 41 min 25 sec west).

LaPorte's wastewater treatment facilities are comprised of a main wastewater treatment plant (WWTP) and the aforementioned CSO storage lagoon. The main WWTP receives approximately 3 million gallons per day (MGD) of dry weather flow, and has an average design capacity of 7 MGD. Thus, there is plenty of available treatment capacity at the main WWTP to accommodate any future population growth.

The wet weather capacity of the main WWTP was established by full-scale testing. The maximum treatable peak and continuous treatable flow that the main WWTP can successfully treat during wet weather is 10 MGD. Once the main WWTP reaches 10 MGD several processes start to reach their maximum capacity. Specifically the discharge troughs on the primary clarifiers fill, raising the water level in the tanks, resulting in carryover of solids out of the primary clarifiers' scum line. However, LaPorte believes that the secondary unit treatment process and disinfection process have capacities greater than 10 MGD. This is more fully discussed in the context of "Control Alternative 3." See Chapter 6 and Figure 6-2 for additional information.

Figure 1-3 is an aerial photograph of LaPorte's wastewater treatment facilities. Figure 1-4 is a process flow diagram of LaPorte's main WWTP. The flow into the main WWTP is controlled through two computer-controlled gate valves. These valves act in concert to limit the flow coming into the main WWTP to 10 MGD. If the flow drops below 10 MGD they will automatically open to maintain that volume of wastewater entering the facility. If the upstream flow exceeds 10 MGD they will automatically start closing until the flow into the plant is reduced to 10 MGD. Flows in excess of the 10



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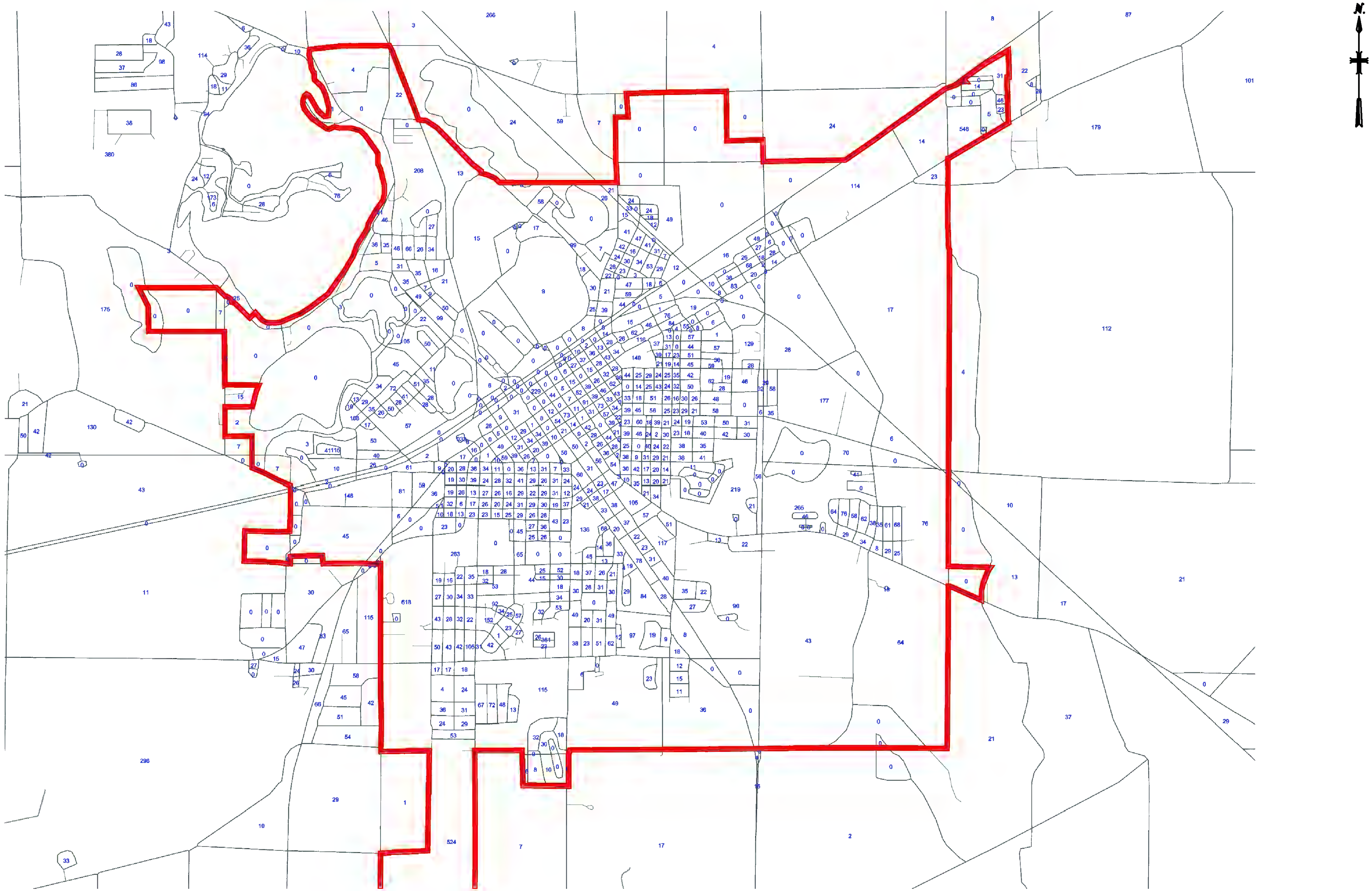
COMBINED AND SANITARY SEWER MAP

FIGURE 1-1



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CENSUS 2000 - LAPORTE CENSUS BLOCKS

FIGURE 1-2

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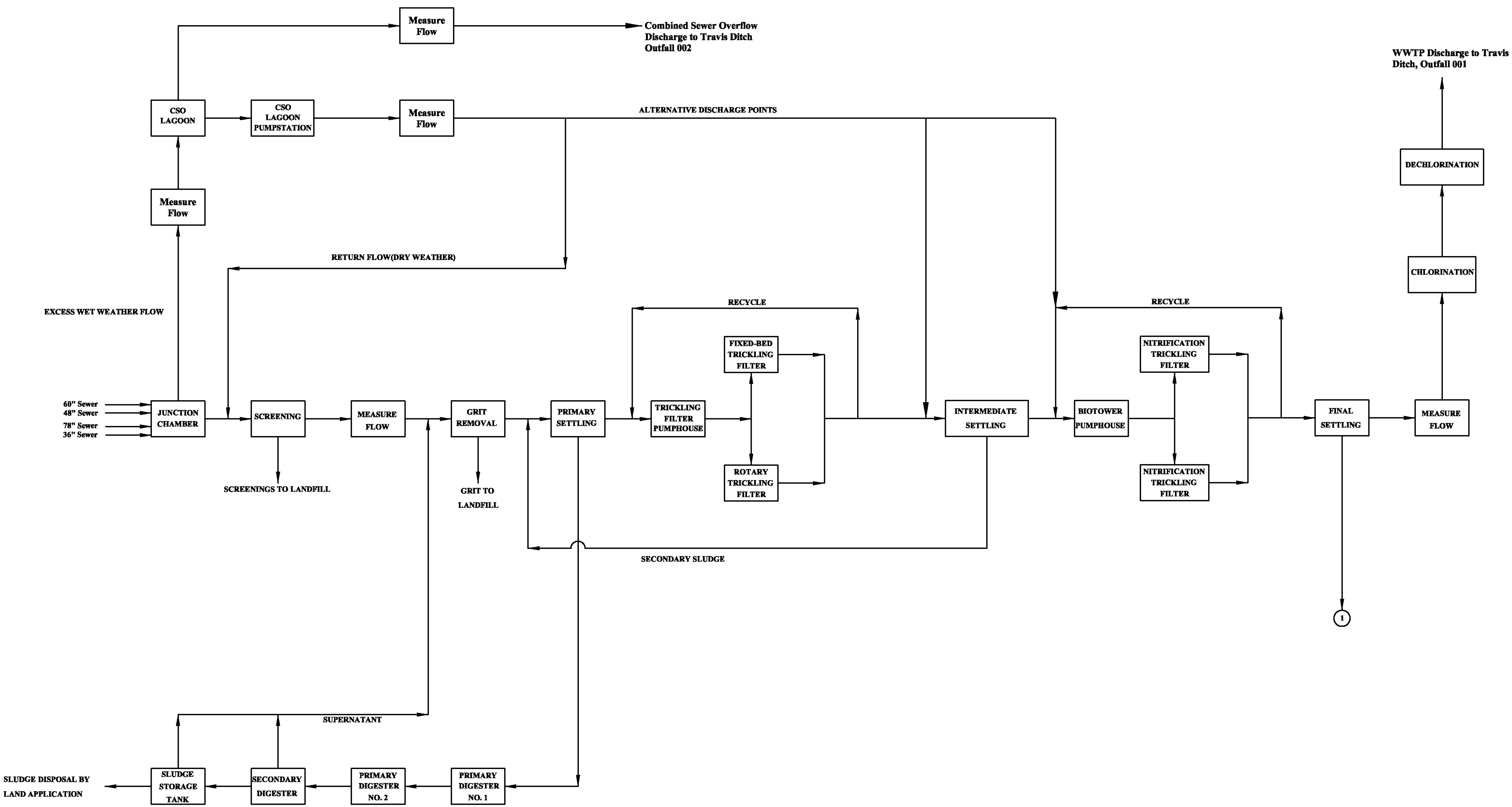
AERIAL PHOTO OF LAPORTE WWTP

FIGURE 1-3



MALCOLM PIRNIE	NIES engineering, inc. 2421 173 Street, Hammond, Indiana. 46323 Phone: (219) 844 8680 Fax: (219) 844 7754 municipal, civil, environmental & transportation engineering	CITY OF LAPORTE CSO LONG TERM CONTROL PLAN	WASTEWATER TREATMENT PLANT PROCESS FLOW DIAGRAM	FIGURE 1-4

MGD peak capacity of the main WWTP are diverted into the 17-acre CSO storage lagoon. With a useable depth of 2.3 feet, the CSO storage lagoon can hold 12.8 million gallons. When the CSO lagoon is full, and the main WWTP is operating at its 10 MGD capacity, any additional influent flows result in an overflow of combined sewage to Travis Ditch through permitted CSO Outfall 002.

When there is available capacity at the main WWTP, the wastewater captured in the CSO lagoon is pumped to the headworks of the main WWTP at a maximum rate of 2.3 MGD via the CSO lagoon return pumping station, which has two submersible pumps that were installed in 1998. This pumping facility is also tied into the computer control system and is automatically turned on whenever the lagoon level rises above the operational set point and there is available capacity at the headworks of the main WWTP. The system operates as follows: After a storm passes, and the main WWTP influent plant flow drops from its peak of 10 MGD to 9 MGD, it triggers the first pump to turn on. This pump can pump at the rate of 1 MGD and that brings the influent flow to the main WWTP back up to 10 MGD. When the influent flow (with the first pump running) continues to drop and reaches 8.5 MGD the second, larger capacity pump starts and the first pump then shuts down. This brings the main WWTP influent flow back up to 10 MGD. If additional rain/inflow causes the main WWTP influent flow to rise above 10 MGD, the pumps will automatically shut down, allowing the main WWTP to treat the incoming flow at its maximum available capacity. When capacity at the headworks is available, the pumps will automatically start again.

Both pumps are not run simultaneously due to the hydraulic capacity and size of the CSO pump return lines. The larger pump runs at the capacity of the return lines, and is able to pump at the rate of 2.6 MGD from the lagoon to the headworks. If the smaller pump is operated simultaneously with the larger pump, return flow would increase to 2.9 MGD, a net increase of only 0.3 MGD.

1.4 RECEIVING STREAM

Figure 1-5 is a map showing Travis Ditch, the receiving stream for the main WWTP effluent and for overflows from the CSO storage lagoon. The discharge from the main WWTP and/or the CSO lagoon forms the headwaters of Travis Ditch, which flows to the Kankakee River.

Travis Ditch receives flow from Shurz Ditch approximately 0.8 miles downstream of La Porte's wastewater treatment facilities. Approximately 6 miles downstream, Travis Ditch receives discharges from two other NPDES permitted facilities, Roll Coater, Inc. and the Kingsbury Utilities Wastewater Treatment Plant. In this same area, Travis Ditch also merges with Kingsbury Creek, which flows into Travis Ditch from the northwest. Travis Ditch also receives drainage from farm fields along its path to the Kankakee River.

1.5 SOURCE DOCUMENTS

The City has developed numerous documents that are important to the development of the LTCP. The LTCP has been prepared in coordination with the documents listed in Table 1-1.

TABLE 1-1

PREVIOUS REPORTS

Report Title	Prepared By	Date
Wastewater Treatment Plant Facilities Plan	Murphy Consultants	1977
Combined Sewer System Operation Plan	Boyd E. Phelps	1989
Combined Sewer System Operational Plan, Addendum #1	Haas & Associates	1992
Combined Sewer System Operational Plan, Minimum Controls 7, 8, and 9	Greeley and Hansen	1998
Stream Reach Characterization Analysis Report	City of LaPorte	2001

1.6 MODIFIED PLANNING APPROVAL

The City of LaPorte requested and received IDEM approval to use the modified planning approach in development of this LTCP. In accordance with *Combined Sewer Overflow (CSO) Long-Term Control Plan Use Attainability Analysis Guidance,* April 2001 (Guidance), the required elements of the LTCP are as follows:

- Establish public participation process
- Consider impacts to sensitive areas near CSO discharge points, and

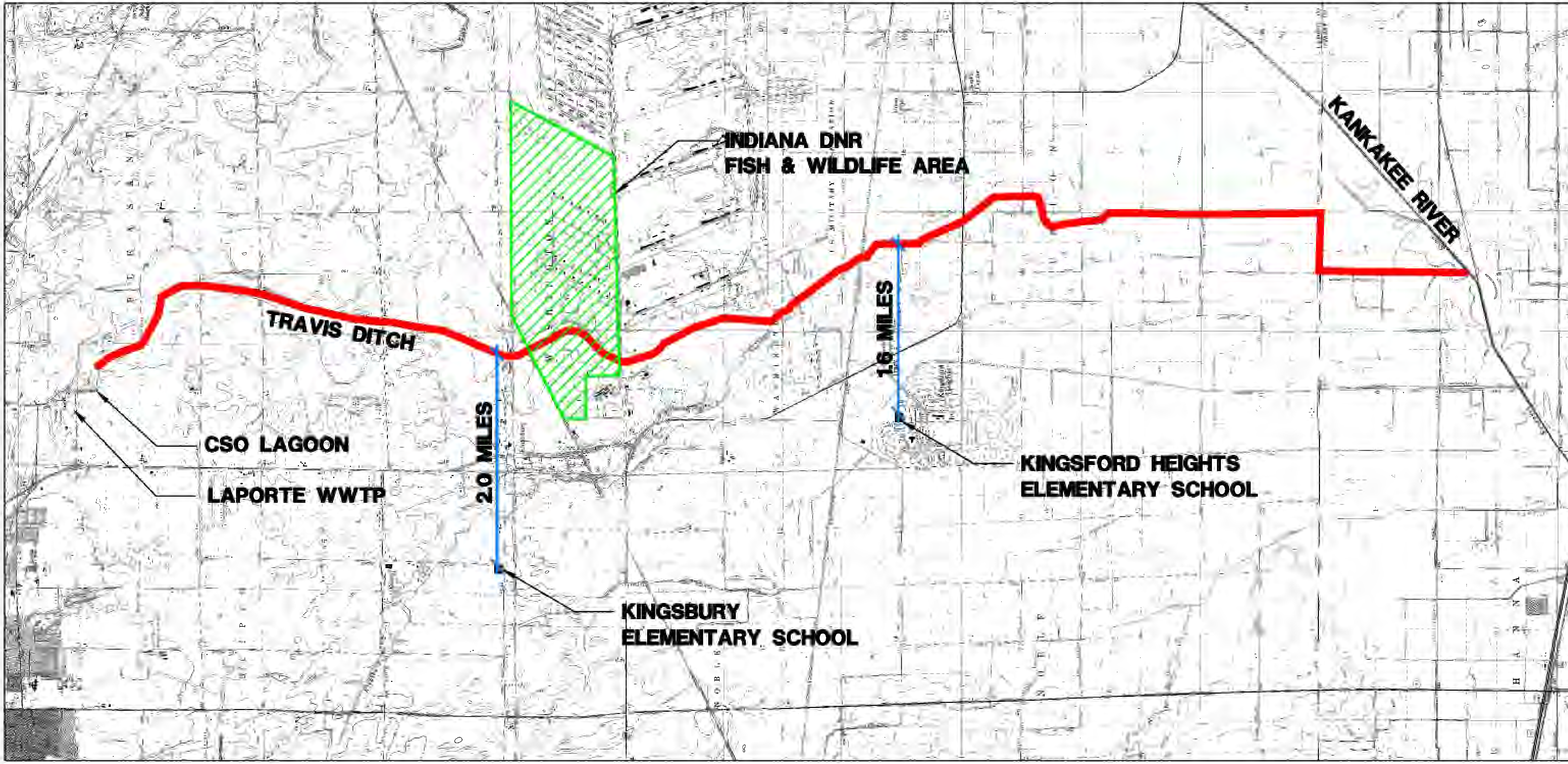
- Post-construction compliance monitoring program and sampling protocols.

In IDEM's April 4, 2002 approval letter for LaPorte's use of the modified planning approach, the following four additional elements were requested:

- CSO Operational Plan
- Documentation of implementation of the Nine Minimum Controls
- Submit revisions to Combined Sewer System Operational Plan
- Maximization of treatment at WWTP
- Monitoring, as necessary, to support CSO control decisions
- Scope, schedule, and budget of proposed CSO controls

In addition, subsequent to the City's submittal of its LTCP in July 2002, IDEM advised the City that an evaluation of various control alternatives must be included in the LTCP.

This LTCP includes the elements required by the Guidance and the requested additional items.



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CSO AND RECEIVING STREAM
LOCATION MAP

FIGURE 1-5

2.0 PUBLIC PARTICIPATION

2.1 INTRODUCTION

As a component of the development of LaPorte's CSO Long-Term Control Plan (LTCP), the City initiated the public participation process at the April 10, 2002 meeting of the Board of Public Works and Safety. At that meeting the Board authorized formation of a Citizens' Advisory Committee to serve as adviser to the Board and to the CSO LTCP team regarding wet weather issues. The CAC included invited members including representatives from the following:

- General Public/ratepayers
- Environmental group
- Adjacent land owner
- Business
- City Council
- Board of Public Works and Safety
- County Drainage Board/Surveyor
- City Development/Planning Department
- County Health Department
- Water Treatment Plant
- Wastewater Treatment Plant
- City Attorney

In addition to the invited members, the City provided an open invitation to the general public to participate in the CSO LTCP CAC. This invitation was published in an article entitled "People Can Talk Sewage" in the *LaPorte Herald Argus* on April 23, 2002.

Appendix C includes various documents related to the public participation including public meeting attendance lists, meeting minutes, newspaper articles and the like. Appendix H includes DVD video recordings of the May 5, 2004 and August 25, 2004 public meetings.

2.2 CITIZENS' ADVISORY COMMITTEE

The CAC convened monthly from April 2002 through July 2002. At the April 24, 2002 meeting, the CAC discussed general background and requirements of the CSO LTCP modified planning approach. Specific discussions during the April meeting focused on understanding La Porte's combined sewer system, CAC feedback on the appropriateness of the proposed public participation process, consideration of sensitive areas (both as defined by the Guidance and any additional local requirements), and the post LTCP sampling and monitoring program. A sign-in sheet was available, and those who attended indicated their names and affiliations.

The minutes were kept by William Hupp of NIES Engineering and are included in Appendix C. At this meeting, the next meeting date was set for May 14, 2002.

The May 14, 2002 meeting included a site visit to the WWTP and to the CSO facilities. During this meeting proposed alternatives were presented and discussed by the CAC. CAC guidance was provided regarding the alternatives that the CAC members considered to be appropriate for further evaluation. A sign-in sheet was available, and those who attended indicated their names and affiliations. At this meeting, the next meeting date was set for June 12, 2002.

At the June 12, 2002 meeting the CAC was presented with an evaluation of the proposed alternatives and a recommended plan and schedule for implementation of the LTCP. The CAC were supportive of the recommended plan. There appears to have been no attendance sheet for this meeting. The next meeting was set for July 18, 2002.

The July 18, 2002 meeting was used to present and discuss the draft CSO LTCP and to address additional recommendations and guidance from the CAC prior to development of the final draft LTCP for submittal to IDEM. There appears to have been no attendance sheet for this meeting.

2.3 ADDITIONAL PUBLIC PARTICIPATION MEETINGS

In response to comments from IDEM on the City's July 2002 LTCP, three additional CSO LTCP public participation meetings were conducted in 2004: on May 5, May 17 and August 25. See Appendix C for documentation regarding these public meetings.

The May 5, 2004 public meeting followed a LaPorte Board of Public Works meeting. The time and place of the meeting was announced several times in the legal notices of the local paper prior to the meeting. There was a newspaper article written about the upcoming meeting the week before. Though well advertised, the meeting was sparsely attended by the public.

The May 5, 2004 meeting (see DVD video of meeting in Appendix H) touched upon several subjects that IDEM had noted needed clarification in their comment letter regarding the City's CSO LTCP. One of these topics concerned the issue of Environmental Justice. The CSO discharge point overflows into the headwaters of Travis Ditch. From this point, Travis Ditch flows south through various agricultural fields until it reaches the Kankakee River in southern La Porte County. At the May 5 meeting it was discussed that Travis Ditch does not flow through any urbanized or sub-urbanized zones, and therefore seems unlikely to have any impact regarding Environmental Justice issues.

During the May 5 meeting, several alternatives were proposed that would allow the City to meet the requirements of the Long Term Control Plan. It was discussed that the City could completely convert the combined sewer system into a separate sanitary and storm sewer system. It was noted that this would be a very expensive undertaking, and would create potential future problems in dealing with storm water treatment.

A second option was proposed that would include increasing the capacity of the main WWTP. It was noted that this too would be a very expensive option. Since the main WWTP currently is at 50 percent of its dry weather capacity, this would lead to a massive underutilization of a newly expanded main WWTP. Additionally, it was noted that flows measured at the headworks of the main WWTP during storm events have been measured at a rate 20 times higher than the main WWTP's peak hydraulic capacity. During intense storms, the peak rate of wet weather flow diverted to the storage lagoon has exceeded 200 MGD (i.e. on July 22, 2002.)

A third option was presented that the City could increase the size of its existing storage lagoon, and increases the rate at which captured wastewater is returned to the main WWTP. This option is not as expensive as the first two options and allows for the use of existing structures.

At this point, the meeting was opened to the public to provide additional input or other control options that may not have been presented. The public appeared to disregard the first option as not very feasible, and the second option was given consideration, but due to the large discrepancy in the volume of the storm flows versus the existing main WWTP's capacity it also appeared an unlikely option. The third given option generated the most discussion, but the question was asked how this option would be performed without completely interrupting the operation of the existing retention and pump-back system. In response to this question it was explained that there would be no interruption in operation because the existing CSO lagoon return pumping station would remain in operation while the new pumping station was being constructed.

At the close of the May 5, 2004 public meeting, contact information was presented for anyone wishing to further participate in additional public meetings concerning LaPorte's Long Term Control Plan. An address was given; a phone number to call was listed, as well as an email address for those who would like to participate via email. To date, there has been no response from any of these contact media. A sign-in sheet was made available, and those who attended this meeting indicated their names and their affiliations.

On May 17, 2004, Jerry Jackson, Superintendent of the LaPorte Wastewater Department, made a presentation to the LaPorte City Council, which was aired over the local cable company's community Channel 43 at 7 pm. The purpose of this presentation was to provide information to the City Council and the public concerning the work that the Wastewater Department performs, as well as to raise community awareness concerning wastewater issues. Jerry Jackson took this time to again raise the issue of CSOs before the assembled audience and the viewing public. The steps that had been taken to reduce CSOs to their current level were discussed, as well the proposed method in the LTCP. Again, citizens who were interested in attending additional meetings were encouraged to write, call or email; the contact information was presented during the presentation. To date, there have been no responses from any of these contact media.

On August 25, 2004, another public participation meeting was held at the LaPorte City Hall following a Board of Public Works Meeting. Again, this meeting was publicized and a sign-in sheet was provided. At this meeting, engineers from Malcolm Pirnie described three potential alternatives for controlling LaPorte's CSOs:

- Sewer Separation

- Disinfection
- Store and Treat

The three alternatives are described in Chapter 6 of this report. Malcolm Pirnie presented preliminary cost estimates for the three alternatives. A DVD video recording of the August 25, 2004 meeting is included in Appendix H.

2.4 RECOMMENDATIONS

Recommendations from the CAC, public participation and notification, LTCP alternative evaluation and selection, and the LTCP implementation schedule have been incorporated into this CSO Long-Term Control Plan. The City intends to continue to take advantage of the knowledge and insights of the CAC during implementation of the CSO LTCP. The CAC will be used as a means to perform “reality checks” during the implementation process to verify that the City’s LTCP continues to meet the local needs as it progresses toward compliance with the water quality and technology based requirements of state and federal law.

3.0 IDENTIFICATION OF AND IMPACTS TO SENSITIVE AREAS

The August 2004 Long Term Control Plan submitted by LaPorte contained a summary of the sensitive areas evaluation conducted by LaPorte, as well as the conclusion that LaPorte's CSO discharges do not impact sensitive areas. IDEM indicated that this conclusion was not adequately supported by the information contained in the Long Term Control Plan.

The primary purpose of identifying sensitive areas is to establish a prioritization for implementation of CSO controls. Additionally, with respect to discharges that impact sensitive areas, the discharges must be eliminated unless it is not physically possible or economically achievable to do so, in which case treatment must be provided.

There is no need to prioritize among various CSO outfalls since LaPorte has only one CSO outfall. Additionally, the goal of LaPorte's plan is the elimination of discharges from the CSO outfall, which would be required if the discharges impacted a sensitive area. Further, if after implementation of the plan, CSO discharges continue, LaPorte will be required to take appropriate corrective actions. At that time, even if the discharges impacted a sensitive area, LaPorte would be able to consider treatment options, rather than options for elimination, as LaPorte would have a sufficient basis to establish that elimination is not physically possible or economically achievable.

For these reasons, IDEM and LaPorte agreed that in this particular case, the sensitive areas evaluation is unnecessary, and therefore, additional resources should not be devoted to this issue.

4.0 CHARACTERIZATION, MONITORING AND MODELLING OF THE COMBINED SEWER SYSTEM

4.1 USE OF SRCER DATA TO MODEL EVENTS AND DESCRIPTIONS OF CSO CONTROL METHODS

The City of LaPorte used the data from its Stream Reach Characterization Evaluation Report (SRCER) to help it model the effects of its CSO discharges. The City has been actively working to reduce CSO discharge events since the mid-1990s. Initially a temporary pumping solution was implemented as a means to control dry weather overflows from the CSO storage lagoon. This solution worked for the dry weather overflows, but did little to otherwise reduce CSO discharge volumes due to the small size of the pump. In 1998 a significantly larger and permanent lagoon return pumping station was installed. This station resulted in a tremendous reduction in the number of CSO discharge events (See Chapter 5).

Additionally, LaPorte has been active in removing inflow and infiltration to the combined sewer system. In 1999, while constructing the Lake Level Control Project ("Siphon"), the City removed drainage from the Beechwood golf course area and repaired a broken section of pipe in the Patton Cemetery wetlands, two major sources of infiltration. With the assistance of INDOT, LaPorte has separated storm drains along Pine Lake Avenue and is in the process of preparing for storm sewer separation along Monroe Street (State Road 4).

LaPorte also has plans to reduce and control the amount of runoff entering the collection system from several large factories on the east side of town with the Darlington-Factory project. The Darlington-Factory project will greatly reduce the volume of storm water passing through several historically flood-prone areas.

4.2 FLOW MEASUREMENT

The City of LaPorte has monitored this reduction in CSO discharge events through three distinct flow measurement points (See Photo 4-1). An ultrasonic flow meter at the main WWTP headworks flume, which was installed during the 1988 expansion, monitors main WWTP influent flow. An ultrasonic level meter at the overflow weir of the CSO storage lagoon, which was installed in 1992, monitors CSO discharges. A radar-based flow meter was installed in the CSO lagoon influent channel in May, 2002 replacing a previous weir-level based system. The radar-based flow meter brought the quality of the CSO influent measurements up to the same high quality standard that the main WWTP headworks and CSO discharge flow measurements have been. The data collected from these meters are processed and collected by a programmable logic controller (PLC). This controller uses the data to calculate the peak flow rate and the daily totals. Furthermore, the data are stored in a database which can be accessed to plot charts and graphs of flow events for any given date and time.

Using the data generated by the flow meters and rainfall data procured from the National Weather Service Rain Gauge located at the LaPorte Water Department, LaPorte has been able to chart the effect of rainfall on the main WWTP influent and the CSO storage lagoon.

Photo 4-1 Aerial Photo of LaPorte wastewater treatment facilities showing flow meters

By plotting previous rain events versus level changes in the CSO lagoon, LaPorte is able to predict the lagoon volume required to store that rainfall event. (See charts in the SRCER in Appendix B). CSO discharges in most communities occur as a result of limited sewer capacity. LaPorte depends on storage to avoid CSO discharge events. Consequently, it is not the rainfall intensity (10-year storm for example), but the volume of water (inches of rainfall) received by the main WWTP during the event that determines whether an overflow occurs. With the existing system, LaPorte can contain, on average, a 1.5 inch storm (see rainfall versus volume received at the main WWTP chart in SRCER Appendix B).

4.3 STORM CHARACTERIZATION

In 2000, IDEM required the City to perform a SRCER to assess the impacts of CSO discharges on Travis Ditch. By that time, the City had already managed to reduce CSO discharge events to a few times per year. In order to complete the requirements of the SRCER, the City monitored all five CSO discharge events that occurred during the allotted time frame given by the State. The infrequency of the events led to the data being collected during all four seasons; one winter event (February), one spring event (April), two summer events (June and July) and one fall event (September). It is interesting to note that the winter event of February would not have occurred if it was only due to the rainfall. However, a combination of the rainfall, the snow already on the ground that melted, and the fact that the ground was frozen resulted in 100 percent runoff without the ground absorption that would typically occur during the summer months. The classification of these events was done using the Indiana DNR Division of Water's website for design storms (http://www.in.gov/dnr/water/surface_water/rainfallfrequency/). Using the guidelines given by the website, the SRCER events are classified as follows:

- April 20, 2000 – 1 Year Storm
- June 24, 2000 – 5 Year Storm
- September 11, 2000 – 10 Year Storm
- February 24, 2001 – 1 Year Storm (but with special exceptions due to the winter nature of the event)
- July 7, 2001 – 10 Year Storm

Rainfall maps used to classify these storms were derived from Bulletin 71, "Rainfall Frequency Atlas of the Midwest", excerpts of which are included in Appendix F.

4.4 SRCER SAMPLE COLLECTION AND DATA

The overflow samples collected during the SRCER were collected at the CSO overflow point (see Photo 4-2). This point is the sole discharge, or end-of-pipe, for the CSO lagoon. Since LaPorte is the headwaters for Travis Ditch, the only water entering the ditch at this point is the mixture of water flowing over the CSO storage lagoon weir and the effluent discharge from the main WWTP (see Photo 4-3).

Photo 4-2: CSO Storage Lagoon Overflow

Photo 4-3: LaPorte main WWTP Outfall 001 on left and CSO Storage Lagoon Overflow Outfall 002 on right

By monitoring the effluent discharge from the CSO storage lagoon and using the required monitoring data from the main WWTP effluent discharge, the impact from the CSO discharge can be calculated based on the flow volumes measured from each source. The samples that were collected during the SRCER were analyzed for the parameters in LaPorte's NPDES permit. These parameters included $CBOD_5$, TSS, pH, D.O., ammonia, *E. coli*, and the metals cadmium, copper, chromium, lead, nickel and zinc. The *E. coli* samples were diluted down by 1 ml sample to 1 L, as it was taken into consideration that the CSO discharge would contain sewage which has received only primary settling treatment in the CSO storage lagoon. Even with such precautions, many of the *E. coli* readings came back with a result of TNTC (too numerous to count). As is stated in the SRCER Appendix D, this result of TNTC equates to a colony count of higher than 200,000 colonies/100 ml sample. With this in mind, any result of "TNTC" in the SRCER data for *E. coli* means that the colony count was in excess of 200,000 colonies/100 ml, almost 1,000 times the Indiana Water Quality Criterion. The noted exception was the

February 24, 2001 CSO event. Since that event happened during the winter, when the State of Indiana has no bacteriological criterion, this sample was not evaluated for *E. coli*.

5.0 CSO OPERATIONAL PLAN

5.1 DOCUMENTATION OF NINE MINIMUM CONTROLS

In July 1994, IDEM approved the CSO Operational Plan (CSOOP) for the City of LaPorte that included Minimum Controls 1 through 6. In April 1998, LaPorte submitted revisions to its CSOOP that included Minimum Control requirements 7 through 9. The revised CSOOP is under review by IDEM. The City has fully implemented its CSOOP as approved and Controls 7 through 9 as submitted.

There are several items in the CSOOP that have been addressed since its approval in 1994. Some of the corrective actions taken are described in the following subsections.

5.1.1 Surface Drainage and Ponding Issues

- Flow into the main WWTP has been maximized by a more efficient automated gate control system. This allows for the maximum available capacity of the main WWTP to be utilized effectively.
- The City has continued the maintenance and repair of catch basins around the City.
  - In 1998, LaPorte repaired or replaced 46 catch basins or manholes
  - In 2000, LaPorte repaired or replaced 41 catch basins or manholes
  - In 2001, LaPorte repaired or replaced 41 catch basins or manholes
  - In 2002, LaPorte repaired or replaced 47 catch basins or manholes
  - In 2003, LaPorte repaired or replaced 34 catch basins or manholes
- For the areas listed in the CSOOP, the following problems have been fixed:
  - F Street between 8th and 10th
  - 1st St. by the railroad viaduct
  - Rockwood & Truesdell
  - Corvette Drive
- The following areas listed in the CSOOP are in the planning/financing stages:
  - Brighton / Rush Street. as part of the Boston St improvement
  - Darlington as part of the Darlington/Worden improvement
  - 6th and J Street as part of the future INDOT widening of J Street

- Lincolnway East as part of the planned future INDOT improvement to Lincolnway

5.1.2 Sewer Backup Issues

- Staff and equipment move. LaPorte's Wastewater Collection staff and equipment were formerly housed at the Street Department. They have since been moved out to the main WWTP site to better integrate with the Wastewater Department activities.
- More proactive cleaning of trunk lines. The collection crew jetted 6,439 feet of sewer mains in 2003. By mid 2004, they have already jetted 4,010 feet of sewer mains.
- Better records maintenance. All sewer calls, whether to report blockages, locates, or catch basins are now recorded into a single database. This enhances the ability of the Collection crew to spot trouble areas, which allows for a more efficient allocation of time and effort.

5.1.3 Infiltration/Inflow Sources

- Several major infiltration/inflow sources have been corrected since the inception of the CSOOP. With the installation of the LaPorte Lake Level Control Project in 1999, the Beechwood golf course pond infiltration has been eliminated. The Patton Cemetery wetlands infiltration has also been removed from the system. This year, the Pine Lake Avenue stormwater separation project in conjunction with INDOT will be finalized and starting in 2005, the Monroe Street sewer/storm separation will be implemented.

5.1.4 Infiltration into the CSO Storage Lagoon by the Natural Spring

- Infiltration into the CSO storage lagoon by the natural spring below has been accounted for by the use of a smaller automated level maintenance pump as part of the CSO lagoon return pumping system. This automated pumping system allows the current water level in the lagoon to be maintained with minimal effort.

5.2 REVISIONS TO CSOOP

The current CSOOP is reviewed on an annual basis, or in the event of a CSO system operational or physical change.

The current CSOOP is included in Appendix A.

5.3 IDENTIFICATION OF SIGNIFICANT INDUSTRIAL DISCHARGERS

LaPorte currently has had several changes to the significant industrial dischargers list that was included in the CSOOP. The revised list is included below showing which industries have closed, as well as showing the primary parameters that would be of environmental concern during a CSO event for those industries in operation.

TABLE 5-1

SIGNIFICANT INDUSTRIAL USERS

Industry Name	Current Status	Parameters of Concern
Alpha Baking Co.	In operation	BOD, TSS, Oil & Grease, pH
AMPCOR II	In operation	Cadmium, Nickel, Zinc, Chromium, Silver, TSS, Copper, Lead, Cyanide, Oil & Grease, pH
AMPCOR II	In operation	Cadmium, Nickel, Zinc, Chromium, Silver, TSS, Copper, Lead, Cyanide, Oil & Grease, pH
Dreske Silver Plating	In operation	Cadmium, Lead, Silver, Cyanide, pH
Enviro Solutions	In operation	BTEX
Harrison Engine Service	In operation	Cadmium, Chromium, Copper, Lead, Nickel, Silver, Zinc, Cyanide, TSS, Oil & Grease, pH
HRR	Soon to be in operation	Ammonia, BOD, TSS, Oil & Grease, pH
Howmet	In operation	Chromium, Copper, Lead, Nickel, Silver, Zinc, Oil & Grease, pH
Jefferson Smurfit	CLOSED	
Keystone Service, Inc.	CLOSED	
La Porte Publishing Co.	In operation	Silver
Lewis Baking Co.	In operation	BOD, TSS, Oil & Grease, pH
Martin Oil Site	CLOSED	
Mechanovent	CLOSED	
Modine Mfg. Co.	CLOSED	
New York Blower Co.	In operation	Cadmium, Chromium, Copper, Lead, Nickel, Silver, Zinc, Phosphorous, Cyanide, TSS, Oil & Grease, pH
Powcote	CLOSED	
Silgan Containers (formerly American National Can)	In operation	Chromium, Phosphorous, Copper, Manganese, Zinc, Oil & Grease, pH
Towndan Enterprises	CLOSED	
Wal-Mart Store	In operation	Silver

5.4 MAXIMIZATION OF TREATMENT AT WWTP

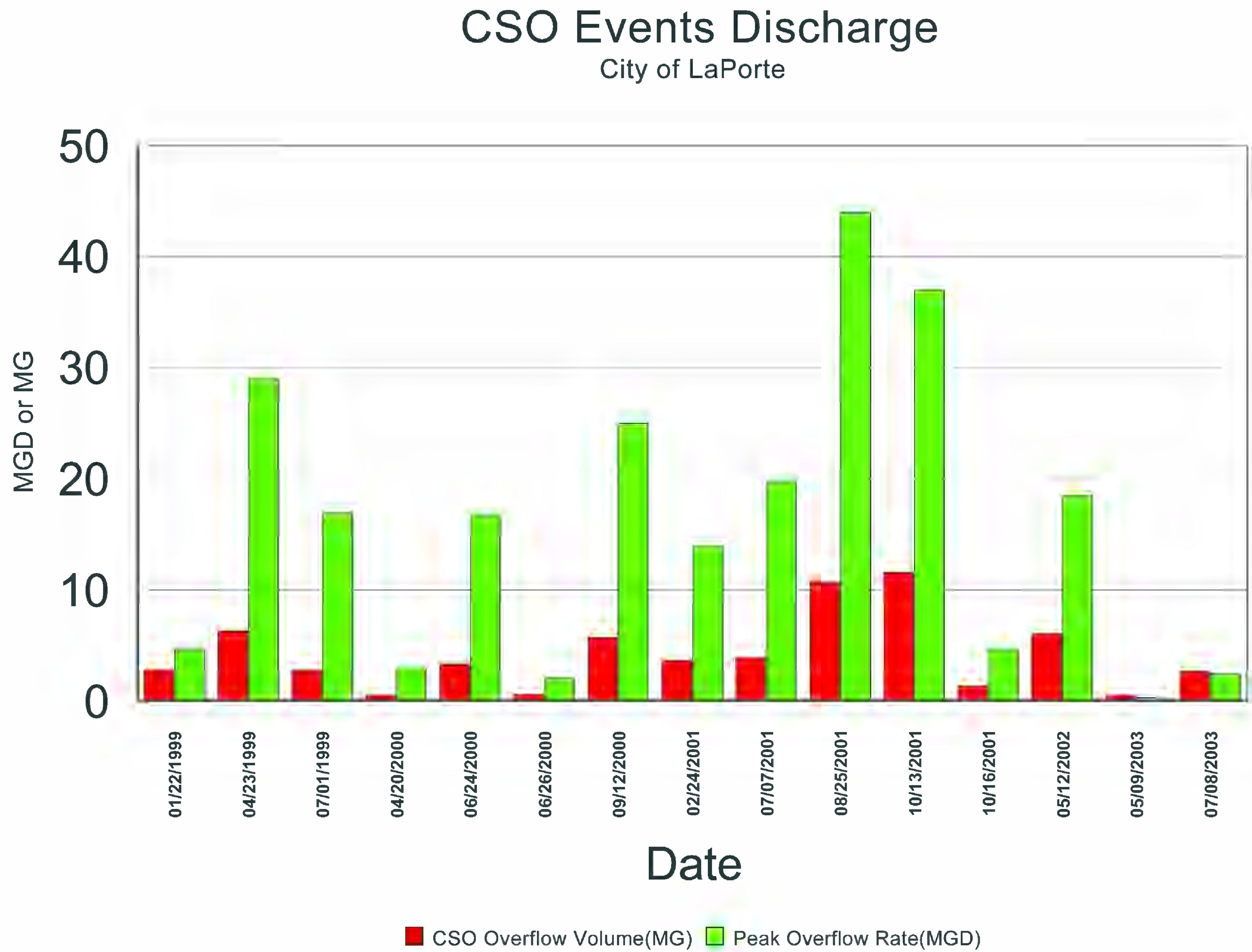
Maximization of flow to (and through) the WWTP is CSOOP minimum control number 4. As shown by the table below, the City of LaPorte has had significant success in the reduction of CSO volume and duration since 1996. The result has been the maximization of flow that receives full treatment prior to discharge to Travis Ditch.

As indicated in Table 5-2, there were a total of 15 CSO events for the five year period from 1999 through 2003, an average of 3 events per year. The total *volume* of overflow in million gallons, and the peak *rate* of overflow in MGD, for the 15 events are plotted on Figure 5-1. Appendix D includes a tabulation of LaPorte's daily CSO operating data from December 1996 through July 2004.

TABLE 5-2

CSO VOLUMES AND DURATIONS

Year	CSO Discharge Events (#)	Calendar Days in Which CSO Occurred (days)	Total Discharge Duration (days)	CSO Volume (MG)
1996	46	165	No Data	211.7
1997	52	209	197.5	151.0
*1998	32	74	50.4	70.8
1999	3	6	4.9	12.0
2000	4	7	3.8	10.3
2001	5	13	6.9	31.4
2002	1	2	1. 8	6.1
2003	2	3	1.0	3.3
**2004	1	1	1.0	0.5
Avg prior to CSO Lagoon Return Pump Station (1996 and 1997)	49	187	197.5	181.4
Avg with CSO Lagoon Return Pump Station (1999 through	3	6	3.3	12.6



MALCOLM PIRNIE	NIES engineering, inc. 2421 173 Street, Hammond, Indiana. 46323 Phone: (219) 844 8680 Fax: (219) 844 7754 municipal, civil, environmental & transportation engineering	CITY OF LAPORTE CSO LONG TERM CONTROL PLAN	CSO EVENTS DISCHARGE	FIGURE 5-1

TABLE 5-2

CSO VOLUMES AND DURATIONS

Year	**CSO Discharge Events (#)**	**Calendar Days in Which CSO Occurred (days)**	**Total Discharge Duration (days)**	**CSO Volume (MG)**
2003)				
Reduction	94%	97%	98%	93%

* CSO Lagoon Return Pump Station operated a portion of 1998.
** Partial year to 8/29/2004. This year was not included in the averages.

5.5 MONITORING FOR CSO CONTROL DECISISONS

LaPorte's CSO outfall has been monitored since 1996 for overflow volume and duration. Additionally, flow into the CSO storage lagoon and flow returned from the lagoon to the main WWTP also have been monitored since 2002 and 1998, respectively.

In July 2001, The City submitted its Stream Reach Characterization and Evaluation report (SRCER). The SRCER is included in Appendix B.

This information has been used by the CSO Citizens' Advisory Committee in formation of its guidance on CSO control planning. This information also was used to form the technical basis for the CSO control evaluation and recommendations.

6.0 CSO CONTROL ALTERNATIVES

6.1 INTRODUCTION

Three alternatives for the control of LaPorte's combined sewer overflow discharges are proposed for development and evaluation:

- Alternative 1 – Sewer Separation
- Alternative 2 – Disinfection
- Alternative 3 – Store and Treat

These alternatives are described in the subsections that follow. Preliminary opinions of probable construction cost are presented for each of the alternatives.

At the end of the chapter, the alternatives are compared and evaluated.

6.2 ALTERNATIVE 1 – SEWER SEPARATION

Under Alternative 1, storm sewers would be constructed in the combined sewer area. The proposed storm sewers would roughly parallel the existing combined sewers and would discharge to Travis Ditch. Street inlets that now connect to the combined sewers would be redirected to the new storm sewers. LaPorte's existing combined sewers would thus be converted to separate sanitary sewers. The lengths and diameters of the proposed storm sewers under Alternative 1 would be roughly equal to the lengths and diameters of LaPorte's existing combined sewers.

Under Alternative 1, the existing CSO storage lagoon would be converted to a "wet weather storage lagoon". If peak wet weather flows due to inflow and/or infiltration into LaPorte's sanitary sewers (converted combined sewers) exceed the plant's peak capacity, the excess flows would be stored in the wet weather storage lagoon. Stored wet weather flows would be returned to the plant using the existing CSO storage lagoon return pump station. After implementation of Alternative 1, peak wet weather flows into the lagoon would be much less than at present because the major sources of storm water, primarily street inlets, would be connected to the new storm sewers.

Under Alternative 1, there would be no overflows from the wet weather storage lagoon. LaPorte's only discharges to Travis Ditch would be treated plant effluent and untreated storm water from the separate storm sewers.

The preliminary estimate of construction cost for Alternative 1 is summarized in Table 6-1.

6.3 ALTERNATIVE 2 – DISINFECTION

Alternative 2 is shown schematically on Figure 6-1.

Under this alternative, the existing CSO lagoon and lagoon return pump station would be used to capture excess wet weather flows. Most storms would be fully captured for subsequent treatment, as at present. However, under Alternative 2, CSO storage lagoon overflows during extreme storms would be disinfected before discharge to Travis Ditch.

Under this alternative, *two* new chlorine contact tanks, with a common divider wall, would be constructed near the southeast corner of the CSO storage lagoon. The North Contact Tank would provide disinfection contact time for lagoon overflows before discharge to Travis Ditch. The South Contact Tank would provide disinfection contact time for treated effluent from the main WWTP.

The main WWTP currently uses gaseous chlorine for disinfection and gaseous sulfur dioxide for dechlorination. Under Alternative 2, the main WWTP would convert to liquid chemicals, namely, sodium hypochlorite for disinfection and sodium bisulfite for dechlorination. The proposed liquid chemicals present less risk than the gaseous chemicals. This alternative includes a new Chemical Building which would be constructed immediately west of the two new contact tanks and would house chemical storage tanks and feed pumps. A paved road would be constructed to the Chemical Building for bulk delivery of the chemicals. The existing Chlorine Building and the existing chlorine contact tank would be removed from service.

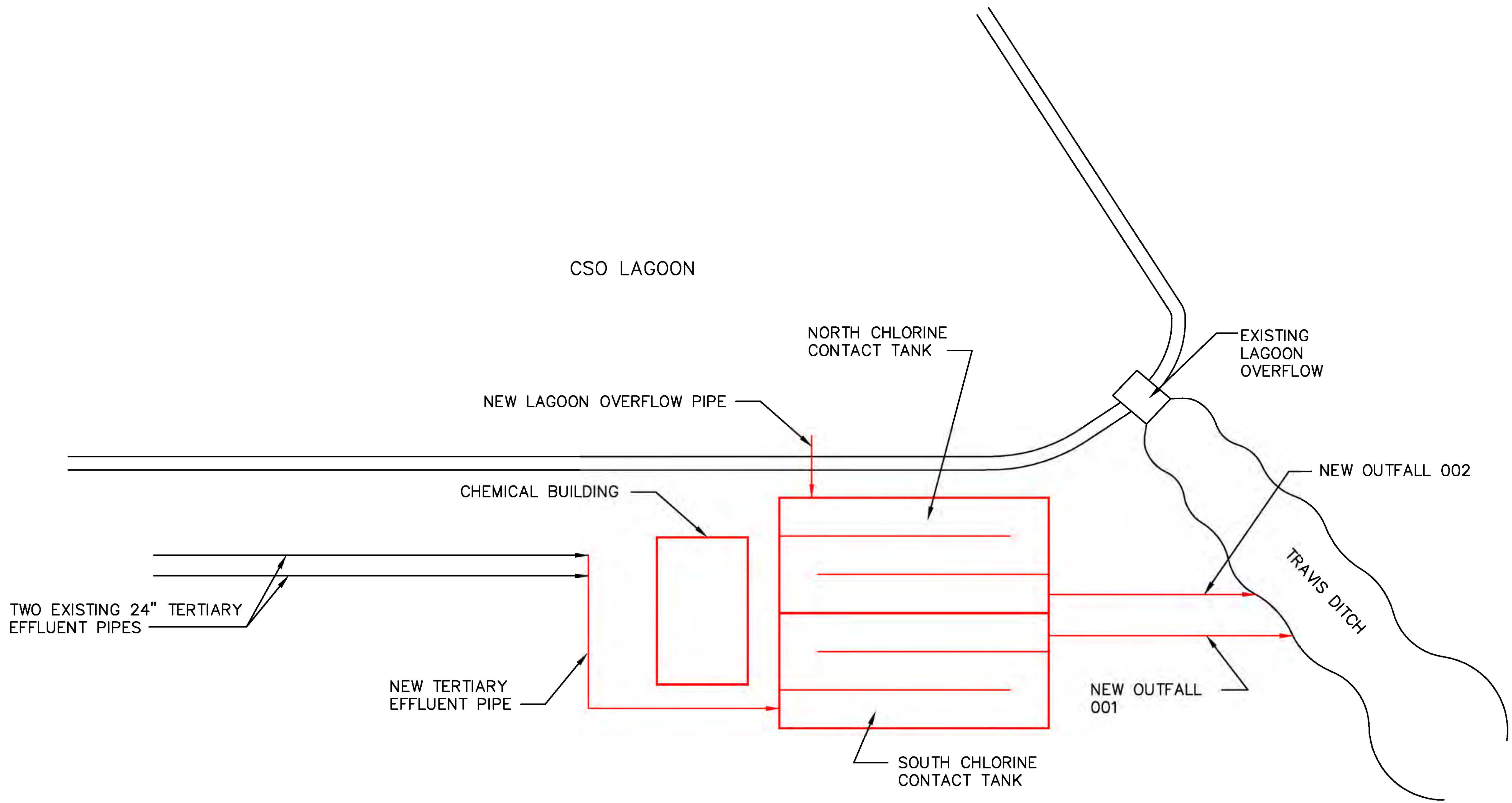
Since the Chemical Building and the South Contact tank would operate continuously during disinfection season, it would be relatively easy to reliably disinfect using the North Contact Tank during the infrequent CSO storage lagoon discharges. It would be less reliable for LaPorte to try to operate a stand-alone disinfection facility for lagoon overflows. Since a stand-alone facility would not operate for long periods of time, it may not be easily and successfully placed into operation during lagoon overflows. Moreover, use of the single Chemical Building would permit relatively fresh chemicals to be used for CSO disinfection. (Sodium hypochlorite loses strength in storage.)

TABLE 6-1

ALTERNATIVE 1 -- SEWER SEPARATION

PRELIMINARY ESTMATE OF CONSTRUCTION COST

Item No.	Item Description	No of Units	Unit	Unit Price	Total
1	Mobilization & Traffic Control	1	LS	$1,000,000	$1,000,000
2	Asphalt Roadway Reconstruction	210,000	S.Y.	$30	$6,300,000
3	4 Feet Diameter Manholes	510	Ea.	$5,250	$2,680,000
4	5 Feet Diameter Manholes	120	Ea.	$6,300	$760,000
5	6 Feet Diameter Manholes	90	Ea.	$7,350	$670,000
6	7 Feet Diameter Manholes	70	Ea.	$9,000	$630,000
7	8 Feet Diameter Manholes	20	Ea.	$10,500	$210,000
8	12-inch Storm Sewer	92,400	L.F.	$35	$3,240,000
9	15-inch Storm Sewer	110,880	L.F.	$40	$4,440,000
10	24-inch Storm Sewer	55,440	L.F.	$55	$3,050,000
11	36-inch Storm Sewer	51,744	L.F.	$110	$5,700,000
12	48-inch Storm Sewer	36,960	L.F.	$160	$5,920,000
13	60-inch Storm Sewer	11,088	L.F.	$265	$2,940,000
14	72-inch Storm Sewer	11,088	L.F.	$350	$3,890,000
Construction Contingency (30%)					**$12,500,000**
Construction Subtotal					**$54,000,000**
Non-Construction (30%)					**$16,200,000**
Total (rounded up)					**$71,000,000**



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CITY OF LAPORTE
CSO LONG TERM CONTROL PLAN

ALTERNATIVE 2
DISINFECTION SCHEMATIC DIAGRAM

FIGURE 6-1

Treated effluent from the main WWTP would be directed through the two existing 24-inch pipes to a new pipe which would connect to the head of the South Contact Tank. Sodium hypochlorite would be fed to the head of the tank for disinfection. Sodium bisulfite would be fed at the outlet of the tank for dechlorination.

The North Contact Tank would normally be empty. At times when the CSO storage lagoon overflows, the lagoon discharges would be discharged to the head of the North Contact Tank. Sodium hypochlorite and sodium bisulfite would be fed to the inlet and outlet ends of the North Contact Tank, respectively. When the CSO storage lagoon ceases overflowing, the North Contact Tank would be emptied.

Each contact tank would have its own outfall pipe to Travis Ditch. Flow rates in each outfall would be monitored and recorded. Flow-proportioned automatic samplers would be provided for each outfall.

The preliminary estimate of construction cost for Alternative 2 is summarized in Table 6-2.

6.4 ALTERNATIVE 3 – STORE AND TREAT

Alternative 3 is shown schematically on Figure 6-2.

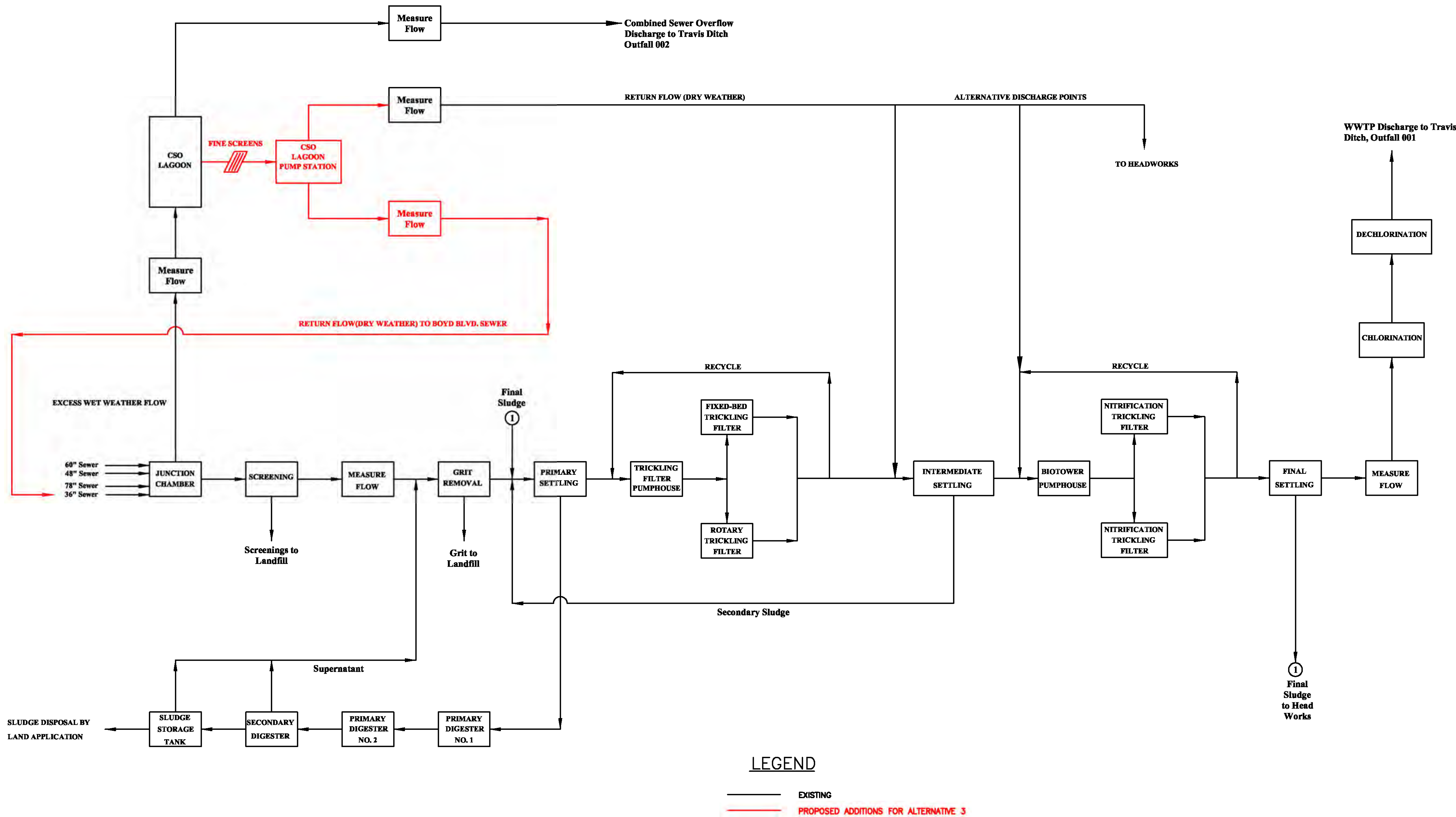
The goal of this alternative is the elimination of CSO discharges. This alternative is an expanded, enhanced version of LaPorte's present method of operation. Under this alternative, the maximum operating depth of the lagoon would be increased by up to 3.4 feet, increasing the CSO storage volume from 12.8 million gallons to as much as 31.5 million gallons. Based upon engineering assessments, the proposed increase in operating depth of 3.4 feet is the maximum allowable increase that can be made while continuing to allow for gravity flow of combined wastewater into the lagoon. (The exact increase in lagoon depth needs to be confirmed hydraulically, so that at maximum depth there is enough available hydraulic head to get peak wet weather flows into the lagoon for storage, without pumping). The increased lagoon operating depth would be accomplished by placing more fill on the northeast section of lagoon embankment to increase its height. (The west and south sections of embankment are already higher than the northeast embankment and do not need to be raised.) The lagoon overflow weir would be raised and an emergency motor-operated sluice gate would be provided for protection of the embankment.

TABLE 6-2

ALTERNATIVE 2 -- DISINFECTION

PRELIMINARY ESTMATE OF CONSTRUCTION COST

Item No.	Item Description	No of Units	Unit	Unit Price	Total
1	Mobilization	1	LS	$70,000	$70,000
2	Chlorine Contact Tanks with Outfall Sewers				
	Contact Tank Concrete Walls	230	CY	$700	$170,000
	Contact Tank Concrete Slab	270	CY	$400	$110,000
	Junction Chamber Concrete Walls	135	CY	$700	$100,000
	Junction Chamber Concrete Slab	90	CY	$400	$40,000
	Concrete Baffles	120	CY	$700	$90,000
	Equipment (Gates, Samplers etc)	1	LS	$200,000	$200,000
	Bored Piles	3,000	LF	$30	$90,000
	48-inch Outfall Sewer to Travis Ditch	200	L.F	$175	$40,000
	66-inch Outfall Sewer to Travis Ditch	200	L.F	$325	$70,000
3	Chemical Feed Disinfection Building				
	Chemical Feed Building	1	LS	$175,000	$175,000
	Chemical Storage Tanks	2	LS	$5,000	$10,000
	Chemical Feed Systems	4	LS	$20,000	$80,000
	Electricals & Controls	1	LS	$250,000	$250,000
4	Paved Road				
	Gravel	4,000	SY	$3	$12,000
	Paved Road	4,000	SY	$8	$32,000
Construction Contingency (30%)					**$470,000**
Construction Subtotal					**$2,010,000**
Non-Construction (30%)					**$610,000**
Total (rounded up)					**$2,700,000**



MALCOLM PIRNIE	NIES engineering, inc. 2421 173 Street, Hammond, Indiana. 46323 Phone: (219) 844 8680 Fax: (219) 844 7754 municipal, civil, environmental & transportation engineering	CITY OF LAPORTE CSO LONG TERM CONTROL PLAN	ALTERNATIVE 3 STORE AND TREAT SCHEMATIC DIAGRAM	FIGURE 6-2

The existing CSO lagoon return pump station would be replaced with a new larger pump station. The station would house four submersible pumps: three new 2.5 MGD pumps and the existing 2.3 MGD pump which would be relocated from the existing CSO lagoon return pump station. The other existing lagoon pump, a 1.7 MGD unit, is worn and would be retired. Additionally, two mechanical fine screens would be installed on the inlet to the new CSO lagoon return pump station.

In this selected control alternative, the captured wastewater in the CSO lagoon would receive screening (via the newly installed fine screens in the CSO lagoon return pumping station) and primary treatment by the CSO lagoon.

The predominant means by which the CSO lagoon would be dewatered would be to redirect the captured wastewater to the head of the main WWTP, by pumping this wastewater back into the Boyd Avenue sewer. In this scenario all returned wastewater would receive redundant screening and primary treatment (i.e. screening and primary treatment from the CSO lagoon return pump station screens and the CSO lagoon, respectively, and screening and primary treatment via the main WWTP screening devices and primary treatment tanks).

The maximum flow rate that can be treated through the main WWTP primary process is 10 MGD. Therefore the return rate to the Boyd Avenue sewer would be controlled so that the total influent flow rate into the main WWTP does not exceed 10 MGD.

Additionally, when the main WWTP primary process is receiving at least 10 MGD, up to approximately 3 MGD of captured wastewater may be directed through an auxiliary path from the CSO lagoon into the secondary process portion of the main WWTP (as identified in Figure 6-2).[1] In this scenario all wastewater would receive screening, primary treatment, secondary treatment, and disinfection; additionally, some wastewater would receive redundant screening and redundant primary treatment. This control alternative would allow LaPorte to dewater the CSO lagoon as quickly as possible when wet weather occurs, which would in turn allow LaPorte to capture more combined

[1] The maximum auxiliary path return flow rate has not been definitively established, however, preliminary engineering evaluations indicate that a rate of approximately 2 to 4 MGD can be achieved. Plant scale stress testing will need to be conducted to determine the maximum flow rate that can be successfully treated through the auxiliary path.

sanitary sewage and storm water in the event that the wet weather conditions continue or in the event that subsequent wet weather conditions quickly ensue.

The preliminary estimate of construction costs for Alternative 3 is summarized in Table 6-3.

6.5 ENVIRONMENTAL EVALUATION

Advantages of Alternative 1 are that it will meet current regulatory requirements, inasmuch as CSOs will be eliminated. An additional advantage is that the new storm sewers under Alternative 1 will improve drainage in LaPorte, reducing street flooding.

Alternative 1, however, is considered less advantageous environmentally than the other two alternatives. The reason is that, under Alternative 1, while sanitary flows would be completely treated, storm water flows to Travis Ditch would be completely *untreated*. Solids, bacteria and other pollutants that are carried into the storm sewers with the runoff would be discharged to Travis Ditch. Water pollution and attainment of in-stream water quality standards will still be an issue.

Another disadvantage of Alternative 1 is that peak wet weather discharges to Travis Ditch will be greater than under Alternatives 2 and 3. The reason is that the dampening effect of the lagoon will be eliminated under Alternative 1. The higher peak flows to the ditch will increase erosion and the sediment load in the receiving stream. It will also increase the potential for downstream flooding, which already occurs along the Kankakee River. In contrast, Alternatives 2 and 3 will capture and discharge flows to the ditch at a more gradual, steady rate (i.e. at the rate that the main WWTP can empty the lagoon when the storms subside).

Alternative 1 is clearly much more expensive than the other two alternatives. For these reasons, Alternative 1, complete sewer separation, is not recommended.

In the future, peak wet weather flows in the combined sewers would be lower than at present. This is a result of partial sewer separation that would be accomplished in connection with highway projects (See Section 4.1 for descriptions of planned, partial sewer separations).

Alternatives 2 and 3 would both utilize the CSO lagoon. As indicated in Table 5-2, the CSO frequencies, durations and volumes under the present method of operation are

TABLE 6-3

ALTERNATIVE 3 -- STORE AND TREAT

PRELIMINARY ESTMATE OF CONSTRUCTION COST

Item No.	Item Description	No of Units	Unit	Unit Price	Total
1	Mobilization	1	LS	$50,000	$50,000
2	Outfall Modification Costs	1	LS	$100,000	$100,000
3	East Embankment				
	Borrow/ Spreading	5,000	CY	$10	$50,000
	Compaction	5,000	CY	$0.5	$3,000
	Seeding	24,500	SF	$0.6	$15,000
4	New CSO Lagoon Pumpstation				
	Wet Well (12' x 12' x 20') & Channel	1	EA	$60,000	$60,000
	Building	1,200	SF	$80	$100,000
	Fine Screens	2	EA	$80,000	$160,000
	New 2.5 MGD Pumps	3	EA	$60,000	$180,000
	Relocate 2.3 MGD Pump	1	LS	$3,000	$3,000
	Electrical Controls	1	LS	$50,000	$50,000
	Flow Meter	1	EA	$10,000	$10,000
5	8' Diameter Concrete Pipe at Travis Ditch	700	LF	$380	$270,000
6	Force Main and Valves	1	LS	$60,000	$60,000
Construction Contingency (30%)					**$340,000**
Construction Subtotal					**$1,460,000**
Non-Construction (30%)					**$440,000**
Total (rounded up)					**$1,900,000**

greatly reduced under the present method of operation compared to what they were prior to 1998, when the CSO lagoon return pump station was placed into service.

Under Alternative 2, the lagoon's available storage would be maintained at 12.8 million gallons and the existing CSO lagoon return pump station would be maintained. The CSO storage lagoon would continue to overflow infrequently. The lagoon overflows under Alternative 2 would be disinfected, but would not receive full treatment. Thus the lagoon overflows may violate other, non-bacteria NPDES permit limits.

Another disadvantage of Alternative 2 is that the CSO disinfection facilities would be very infrequently used; the North Contact Tank would only be used about three times a year. Alternative 2 is an expensive project for such infrequent use.

Under Alternative 3, the effective storage volume in the lagoon would be increased to approximately 31.5 million gallons. Looking at Figure 5-1 and the CSO discharge data in Appendix D, the biggest discharge event, by volume, since construction of the CSO lagoon return pump station in 1998 was the CSO discharge event that began on October 13, 2001. A total of 11.6 million gallons overflowed during that event, which spanned from October 13 to October 14, 2001. LaPorte's operating records indicate that *all* wastewater resulting from *all* storms from 1997 through April 2005 would have been captured (i.e. there would have been no CSO storage lagoon overflows) had the storage volume proposed in Alternative 3 been available.

Using the rainfall/volume chart from the SRCER (Appendix B), 31.5 million gallons of storage could retain the following storms:

- 2 year frequency, 72 hour duration = 3.46 inches
- 5 year frequency, 48 hour duration = 3.87 inches
- 5 year frequency, 24 hour duration = 3.61 inches
- 10 year frequency, 12 hour duration = 3.67 inches

The storm frequencies listed above may be on the conservative (low) side because they are based on the existing CSO lagoon return pump-back rates. The higher rates that would be possible using the lagoon return pump station proposed under Alternative 3 are believed to be capable of capturing even bigger storms than listed above. The proposed new lagoon return pump station would lower the lagoon more quickly, making storage available sooner after a storm. Moreover, it may be possible to effectively capture even more than 31.5 million gallons during a storm because the lagoon return pump station can begin returning flow even before the storm is over, especially if LaPorte is able to effectively utilize the auxiliary path described in Section 6.4 above.

6.6 PROJECT FINANCING AND COST IMPACT ON CUSTOMERS

The accounting firm H.J. Umbaugh & Associates has reviewed LaPorte's wastewater finances. Their review included an evaluation of LaPorte's current operations, additional revenue needed to support current operation, as well as an estimate of the additional review to support CSO LTCP Alternatives 1, 2 and 3. Umbaugh's findings are tabulated in the "Schedule of Estimated Revenue versus Revenue Requirements" included in Appendix G.

Umbaugh's evaluation determined that the rate impact on sewer customers would be as follows:

- The current monthly sewer bill for 5,000 gallons is $20.08.
- A 13.5 percent rate increase is needed to support increased costs for current operations, resulting in a monthly sewer bill of $22.78, exclusive of any capital costs for CSO control.
- The following additional rate increases would be needed to implement the LTCP alternatives:
  - Alternative 1 – a monthly increase of $47.85 for a total monthly bill of $70.64 for 5,000 gallons
  - Alternative 2 – a monthly increase of $1.82 for a total monthly bill of $24.60 for 5,000 gallons
  - Alternative 3 – a monthly increase of $1.28 for a total monthly bill of $24.06 for 5,000 gallons
- Solids that have accumulated in the CSO lagoon over the years need to be removed and properly disposed. The need to do that is common to all three alternatives. Assuming that that cost would be $2 million, an additional monthly increase of $1.35 would be needed and would be added to the monthly bills for each of the three alternatives.

6.7 RECOMMENDED PROJECT

Alternative 3 would provide full treatment for more flow than would either of the other two alternatives. Additionally, Alternative 3 is the most economical (an average of approximately only $1.28/month/household). Thus Alternative 3 is the best alternative environmentally and economically, and therefore Alternative 3 is recommended for implementation.

7.0 IMPLEMENTATION SCHEDULE FOR THE RECOMMENDED PLAN

The City of LaPorte proposes implementation of Control Alternative 3, “Store and Treat,” as its CSO Long Term Control Plan. This alternative is fully described in Chapter 6.

LaPorte proposes to implement this control alternative, in accordance with the schedule set forth in Table 7-1 below:

TABLE 7-1

PROPOSED CSO LTCP IMPLEMENTATION SCHEDULE

Milestone	Date
Submit construction documents and application for construction permit.	Within one year after IDEM approval of LaPorte’s CSO LTCP
Begin construction of facilities provided for by Control Alternative 3.	Within 180 days after receiving IDEM construction permit
Complete construction and initiate operation of facilities provided for by Control Alternative 3.	Within three years after IDEM approval of LaPorte’s CSO LTCP
Initiate post-construction monitoring.	At the time of initiation of operation of facilities provided for by Control Alternative 3
Complete post-construction monitoring.	12 months after initiation of operation of facilities provided for by Control Alternative 3
Submit Post-Construction Monitoring Report.	Within 15 months after initiation of operation of facilities provided for by Control Alternative 3.

8.0 POST-CONSTRUCTION MONITORING

8.1 POST-CONSTRUCTION MONITORING PROGRAM

Commencing upon the initiation of operation of the facilities provided for by Control Alternative 3, LaPorte will initiate post construction monitoring activities to gauge the effectiveness of Control Alternative 3 in eliminating discharges from the CSO storage lagoon.

The length of the post-construction monitoring will be one year (12 months), and will include the following activities: the continued monitoring of the CSO storage lagoon water level; the continued monitoring of the totalized volume of combined sewage that is pumped back to the main WWTP for treatment; the monitoring of discharges (if any) to Travis Ditch from the CSO storage lagoon (as described below); and the continued monthly submittal of the CSO DMR to IDEM.

Discharges from the CSO storage lagoon will be composite sampled, except samples for pH, temperature, DO, *E. coli*, mercury, volatile organics, and whole effluent toxicity for which grab samples will be obtained. Except as specified below, all discharges from the CSO storage lagoon will be tested for temperature and all the parameters listed in the City's NPDES Permit for Outfall 001, except for total residual chlorine. Discharges from the CSO storage lagoon will be tested for mercury, to the extent practical using the appropriate mercury sample collection kit. One discharge from the CSO storage lagoon will be tested for volatile and semi-volatile organic pollutants. One discharge from the CSO storage will be tested for acute whole effluent toxicity. The volume and duration of each CSO discharge event will also be monitored.

8.2 POST-CONSTRUCTION MONITORING REPORT

A "Post-Construction Monitoring Report" will be submitted to IDEM three months after the conclusion of the post-construction monitoring period. This report will include the data acquired during the post-construction monitoring and any other relevant information as discussed below.

At the end of a one year period, if there have been no discharges from the CSO storage lagoon to Travis Ditch, the CSO LTCP will be deemed to be effective. The continued monitoring of the CSO storage lagoon water level and pump-back flow volumes will be included as part of the CSO Operational Plan.

In the event that a discharge from the CSO storage lagoon occurs during the post-construction monitoring period, the discharge will be sampled as described above. In addition, the CSO LTCP will be re-assessed to evaluate why the CSO overflow occurred, whether it was due to a failure in the design and implementation of the system, due to mechanical/equipment failure, or weather-related events. A description of the overflow circumstances; recommended actions for achieving compliance with the water quality and technology based requirements of state and federal law; a proposed schedule for implementation of such actions; and a proposed monitoring plan for the period of implementation of such actions will be included in the Post-Construction Monitoring Report. It is acknowledged that the recommended actions will be subject to IDEM approval.

8.3 DISCHARGE AUTHORIZATION

It is proposed that the City's authorization to discharge from the CSO lagoon would remain in effect until:

1. The City successfully completes the post construction monitoring period (i.e. no overflows occur during the 12 month post-construction monitoring period). At such time, authorization to discharge from the CSO lagoon would expire; or

2. In the event that one or more overflows occur during the post-construction monitoring period, the City completes implementation of additional actions, as provided for by the Post-Construction Monitoring Report, and as approved by IDEM. At such time, authorization to discharge from the CSO lagoon would terminate (if the additional actions implemented by the City are intended to eliminate discharges from the CSO lagoon), or be modified to include additional limitations and requirements (if the additional actions implemented by the City are intended to treat discharges from the CSO lagoon, as necessary to ensure compliance with the water quality and technology based requirements of state and federal law).

Once authorization to discharge from the CSO lagoon expires, LaPorte understands that such discharges from the lagoon will be prohibited. Should a lagoon discharge occur after the authorization has expired, LaPorte proposes the following: LaPorte will evaluate the causes of the discharges and recommend to IDEM appropriate corrective actions. LaPorte may propose corrective actions that are intended to eliminate the discharges or treat the discharges, as necessary to ensure compliance with the water quality and technology based requirements of state and federal law. If LaPorte proposes corrective actions intended to eliminate the discharges, the prohibition on discharges from the CSO lagoon will remain in effect indefinitely. If LaPorte proposes corrective actions intended to treat the discharges and IDEM approves the proposed corrective actions, the prohibition on discharges from the CSO lagoon will remain in effect until the corrective actions are completed and LaPorte's NPDES Permit has been modified to contain appropriate effluent limitations and monitoring requirements applicable to the discharges.

LAPORTE, INDIANA

COMBINED SEWER SYSTEM
OPERATIONAL PLAN

PHASE I & II

CITY OF LAPORTE, INDIANA
BOARD OF PUBLIC WORKS AND SAFETY

Elmo A. Gonzalez, Mayor
George M. Fettinger, Member
Robert H. Bernth, Member

Constance L. Ebert, Clerk-Treasurer
Robert C. Szilagyi, Attorney

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October, 1989

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NO.
15 09
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<u>APPENDIX INDEX</u>

I. INTRODUCTION

I.1 PURPOSE

The purpose of the combined sewer operation plan (PLAN) for the City of LaPorte, Indiana is to determine and implement the most efficient and effective operation and maintenance procedures for the City's existing combined sewer system. The PLAN also considers possible modifications to the existing system for improved efficiency and effectiveness. However, the basic intent of the PLAN is to make the best possible use of the City of LaPorte's combined sewer system as it presently exists.

I.2 REGULATION

The preparation and submittal of the PLAN is a requirement of the City of LaPorte's current NPDES permit. The specific requirements are contained in Items IIIA, B and C on pages 19 and 20 of the permit, a copy of which is contained in the Appendix as Item A.

I.3 CONTRACT

The study and preparation of this report for the PLAN was authorized by the City of LaPorte, Board of Public Works and Safety, on March 15, 1989. This authorization was for both Phase I and Phase II of the PLAN. A copy of this authorization and a scope of services for each Phase is contained in the Appendix as Item B.

I.4 PHASE I

Phase I of the PLAN presented those portions of the combined sewer system study which could be completed prior to the PLAN submittal deadline of May 5, 1989. Phase I also previewed the remaining Phase II work.

I.5 PHASE II

Phase II of the PLAN completed the combined sewer system study, conclusions and recommendations. The completion of Phase II was weather related due to the wet weather flow monitoring and sampling required. Phase II of the PLAN is incorporated with Phase I into one document.

I.6 IMPLEMENTATION DEADLINE

The LaPorte NPDES permit requirements for the PLAN include one year for complete implementation, following PLAN approval by the Indiana Department of Environmental Management. This one year PLAN implementation period should follow approval of Phase II and <u>not</u> just Phase I.

II. EXISTING COMBINED SEWER SYSTEM

II.1 DESCRIPTION

A combined sewer system receives and transports sanitary and industrial wastewaters and surface water from rainfall and snow melt. The City of LaPorte's combined sewer system presently services approximately 26% of the 8,000 (approximate) acres of area within the city limits. Approximately 7% of the city area is served by separate storm and sanitary sewer systems and 7% of the city area is served by sanitary sewers only. The remaining city area is not sewered due to lack of development. The combined and sanitary sewers are indicated on the LaPorte City Sewer Map in the Appendix, as Item C. The combined, sanitary and separate sewer areas are indicated on the LaPorte City Sewered Area Map in the Appendix, as Item D. An approximate inventory of the combined and sanitary sewer system is also contained in the Appendix, as Item G.

Approximately 33% of the sewered area on the north side of Lincolnway in LaPorte is served by combined sewers. The remainder of this north area is served by separate storm and sanitary sewers or sanitary sewers only. All of the City's 15 wastewater pumping stations are on the north side of Lincolnway and each station is on a sanitary sewer system. The sanitary sewer areas have overland surface drainage into the various lakes in the area. The storm sewers on the north side of LaPorte discharge into the area lakes or into percolation basins or low areas.

Approximately 85% of the sewered area on the south side of Lincolnway in LaPorte is served by combined sewers. The only areas south of Lincolnway that have separate storm and sanitary sewers is in the downtown area and along 18th Street.

The sanitary sewer areas on the south side of Lincolnway have overland flow of surface water into low areas.

Overall, 33% of the 18 square block downtown area of LaPorte is served by combined sewers.

The sanitary sewers in LaPorte are basically on the edges of the City. The sewers in the middle of LaPorte, including the main sewers to the City's wastewater treatment plant at the southeast corner of the City, are all combined sewers. Therefore, the sanitary sewers in LaPorte all discharge into combined sewers.

II.2 AREA DRAINAGE

There is only one actual drainage outlet for the City of LaPorte. This is Travis Ditch which begins at the City's wastewater treatment plant and flows into the Kankakee River. None of the lakes and low areas in LaPorte have drainage outlets. All of the water that drains into these areas dissipates by evaporation and percolation.

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II.3 COMBINED SEWER FLOW TREATMENT

All of the combined sewer system in LaPorte drains into the City's newly renovated and expanded wastewater treatment plant. All of the dry-weather flow, except for isolated peak flow periods, enters the plant for treatment. These dry-weather peak flows and wet weather flows from the combined sewer system enter a 16.75 acre retention pond which overflows directly into Travis Ditch. This is the only overflow on the LaPorte combined sewer system.

11.4 COMBINED SEWER SYSTEM PROBLEMS

Based on information provided by several city personnel, the combined sewer system problems in LaPorte are quite limited. No regular basement flooding problems exist anymore. Furthermore, temporary surface drainage ponding occurs at the following locations or areas:

1. On "F" Street between 8th and 10th Street.
2. Under the railroad viaduct on 1st Street.
3. On Brighton Street at Rush Street.
4. On the west side of the 6th and "J" Street intersection.
5. Rockwood and Truesdell intersection.
6. Darlington Street.
7. Lincolnway east.
8. Corvette Drive, between "I" St. and Mustang Drive.
9. Monroe Manor west of Boyd Boulevard.

It should be mentioned that State and City regulations require reduced flow rates from any additional catch basins or other new connections to existing combined sewers. Therefore, if inadequate surface drainage inlet capacity is the cause of a surface ponding problem, additional capacity can only be provided by storm sewer inlets or drywells.

II.5 COMBINED SEWER SYSTEM MAINTENANCE

The LaPorte City Street Department cleans the existing City sewers and the catch basins on the City's combined sewers. Due to present budget limitations, these cleanings are on an "as-needed" basis. The Indiana State Highway Department also cleans the catch basins on the State Highways through LaPorte, which are the following streets:

1. Pine Lake Avenue
2. Indiana Avenue
3. Lincolnway
4. "J" Street
5. Monroe Street

These catch basin cleanings yield considerable material, however, this is to be expected. No known physical problems exist with the existing catch basins and combined sewers in LaPorte, except that the catch basin grates tend to plug with material. Local residents and the City Street Department clean these catch basin grates as required, to alleviate surface ponding problems.

Street cleaning affects combined sewers and catch basins. The LaPorte City Street Department cleans all street curb and gutter areas on an average of two or three times per year The State Highway Department also cleans the curb and gutters on the State Highways through LaPorte.

The City Street Department has the necessary equipment for cleaning the City's combined sewers, catch basins and streets, however, some of the equipment is in need of replacement.

II.6 COMBINED SEWER SYSTEM CONTROL

The existing combined sewer system in LaPorte is controlled in the following ways:

1. The surface runoff rate into the combined sewers is limited by the present number of catch basins and roof drains that are connected. State and local regulations require delayed flow rates from any new connections to the combined sewers.

2. The quality of surface runoff flow in the combined sewers is affected by the efficiency of street, catch basin and sewer cleaning.

3. The rate of combined sewer flow through the LaPorte wastewater treatment plant is controlled by adjustable flow gates and a fixed bypass weir level at the plant. Improvements would be required however, to expand the control capabilities of these facilities.

4. The wet weather flow rates in the combined sewers are reduced prior to discharge into Travis Ditch by the treatment plant flow rate and the retention pond overflow rate into Travis Ditch.

5. The quality of combined sewer wet weather flow is improved by the treatment plant and retention pond prior to their discharges into Travis Ditch.

II.7 COMBINED SEWER SYSTEM REGULATIONS

LaPorte City Ordinance No. 1760 covers the use, user charges and pretreatment requirements for the City's sewer system. Section 2.05 of this ordinance is included in the Appendix as Item E. Part L of Section 2.05 has been revised by City Ordinance No. 1896 to reflect the requirements of Item II on page 18 of LaPorte's current NPDES permit. A copy of Ordinance No. 1896 is also included in Appendix Item E.

III. EXISTING SURFACE DRAINAGE

III.1 GENERAL

Surface drainage from municipal areas has been scrutinized very closely in recent years. This PLAN is one example. All municipalities with combined sewer systems are required tc have such a PLAN. Similar studies of large storm sewer systems and their discharges are also being considered by the regulatory agencies. Throughout this decade, data has been collected and reports have been published by the regulatory agencies and others concerning the pollutional effects of urban stormwater runoff. It is an accepted fact that all urban stormwater runoff has pollution potential, especially the initial runoff after an extended dry period.

The sources of pollution in urban stormwater runoff included:

1. Spilled chemicals in industrial or other loading areas.
2. Contaminated residues in industrial areas.
3. Petroleum products which are leaked, spilled or poured onto the ground or paved surfaces throughout the city.
4. Fertilizer, insecticide and herbicide residues from the lawn and garden areas throughout the city.
5. Animal droppings.
6. Decaying leaves, grass clippings and other vegetation.

These sources of pollution are compounded when they accumulate in extended dry periods and then are "flushed" into the sewers by a heavy rain. Oftentimes sewer accumulations occur in dry weather and are also "flushed" out during heavy rainfall. Hence the "first-flush" phenomenon that is the greatest pollutional threat.

III.2 COMBINED SEWER OVERFLOW EVENTS

Flow rate estimates and samples have been obtained at the LaPorte wastewater treatment plant inlet junction structure bypass, during several storm events. This is the <u>only</u> combined sewer overflow (CSO) in LaPorte. These results determine the extent of the CSC problem in LaPorte. It should be mentioned that the flow from this CSO enters a retention pond, as described in Section II.3, for treatment prior to overflow into Travis Ditch.

The existing LaPorte wastewater treatment plant inlet junction structure level recorder was used to determine periods of plant bypassing during significant rainfall events. The resulting plant bypass rate was calculated by bypass weir formula. The corresponding plant inlet flow rate recorder and local rainfall information were also obtained. All of this data is presented in Table 1 on the following page.

TABLE 1 - COMBINED SEWER FLOW AND RAINFALL DATA COMPARISON

DATE	TIME	RAINFALL Amount (IN)	RAINFALL Intensity (IN/HR)	PLANT BYPASS Max.Rate (MGD)	PLANT BYPASS Volume (MG)	PLANT FLOW * Max.rate (MGD)	PLANT FLOW * Volume (MG)	TOTAL FLOW Max.Rate (MGD)	TOTAL FLOW Volume (MG)	COMMENTS
4-28-89	6 AM	.54	.36	11.7	-	7.7	-	19.4	-	Plant Flow Chart Data Incomplete for Volume
6-27-89	2 AM	.64	.31	7.5	.17	6.5	.68	14.0	.85	
7-9-89	5 AM	1.30	.73	87.6	4.83	6.2	1.09	93.8	5.72	
8-5-89	3 AM	.53	.27	63.2	1.10	6.2	.71	69.4	1.81	Plant Bypass Maximum Rate was of very shor duration and doesn't correlate with the ave age rainfall intensit
8-15-89	2 PM	.65	.65	76.4	2.37	6.0	.44	82.4	2.81	
8-20-89	3 AM	.43	.29	8.9	.35	6.0	.98	14.9	1.33	
9-1-89	4 AM	1.60	.27	93.3	4.52	5.7	1.09	99.0	5.61	Storm Event was very long and the average rainfaill intensity i not applicable to max mum flow rates.

* Storm flows only with typical wastewater flows excluded.

The flow rate and rainfall intensity data in Table 1 are graphically displayed on Figure 1 on Page III-4. By graphically averaging the data on Figure 1, a total combined sewer storm flow rate versus rainfall intensity curve has been indicated. The approximate slopes of this curve yield 25 MGD of storm flow rate per inch per hour of rainfall intensity for intensities up to .25 inches per hour and 200 MGD/in./hr. for intensities above .30 inches per hour.

The flow volume and total rainfall data in Table 1 are graphically displayed on Figure 2 on page III-5. By graphically averaging the data on Figure 2, a total combined sewer storm flow volume versus total rainfall curve has been indicated. The approximate slope of this curve yields 3.4 million gallons of storm flow per inch of rain.

By comparing rainfall and plant flow data, the storm flow concentration time at the LaPorte wastewater treatment plant has been determined to be one hour. In other words, one hour after it starts to rain in LaPorte, the treatment plant flows start to increase as a result.

Additional wet weather flow monitoring data determined that the wet weather storm flow rates at the LaPorte wastewater treatment plant are contributed by the four plant inlet sewers as follows:

PLANT INLET SEWER	AREA OF TOWN SERVED	PERCENT OF TOTAL INFLOW RATE
36"	S.W. Tip & Relief for N.W. Corner	8%
48"	E. Area	23%
60"	E. Edge & Relief for E. Area Above	6%
78"	Remainder of Town	63%
	TOTAL	100%

The LaPorte wastewater plant personnel periodically grab-sampled and tested the plant inlet junction structure bypass flow during the course of this study. The results of this work are summarized in Table 2 below:

TABLE 2 - LAPORTE WASTEWATER TREATMENT PLANT

BYPASS FLOW QUALITY DATA

DATE	$CBOD_5$ (mg/l)	TSS (mg/l)
4-4-89	98.2	178
4-17-89	188	586
4-18-89	89.1	476
4-28-89	158	457

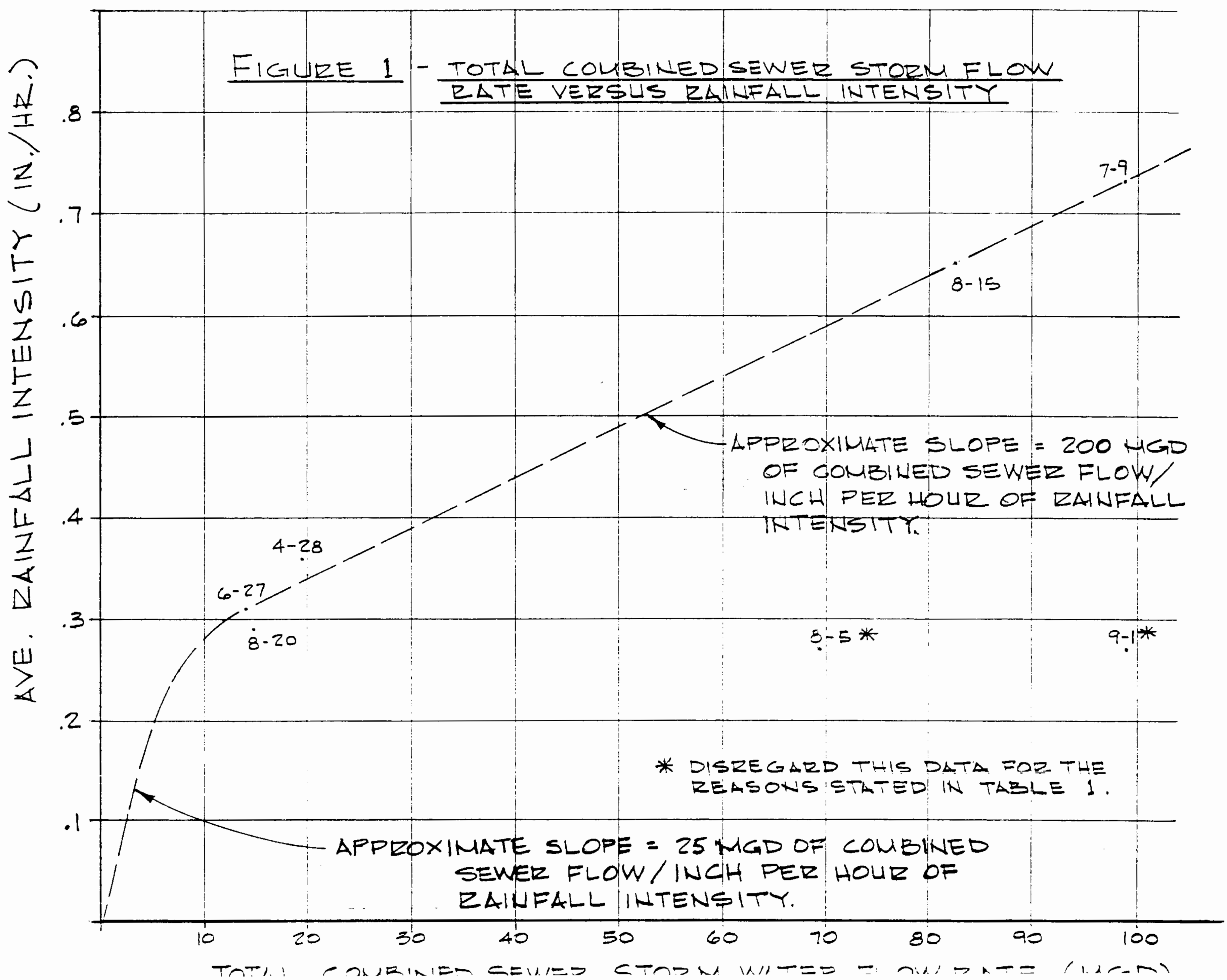
FIGURE 1 - TOTAL COMBINED SEWER STORM FLOW RATE VERSUS RAINFALL INTENSITY
AVE. RAINFALL INTENSITY (IN./HR.)
.8
.7
.6
.5
.4
.3
.2
.1
10
20
30
40
50
60
70
80
90
100
7-9
8-15
4-28
6-27
8-20
8-5 *
9-1 *
APPROXIMATE SLOPE = 200 MGD OF COMBINED SEWER FLOW/INCH PER HOUR OF RAINFALL INTENSITY.
* DISREGARD THIS DATA FOR THE REASONS STATED IN TABLE 1.
APPROXIMATE SLOPE = 25 MGD OF COMBINED SEWER FLOW/INCH PER HOUR OF RAINFALL INTENSITY.

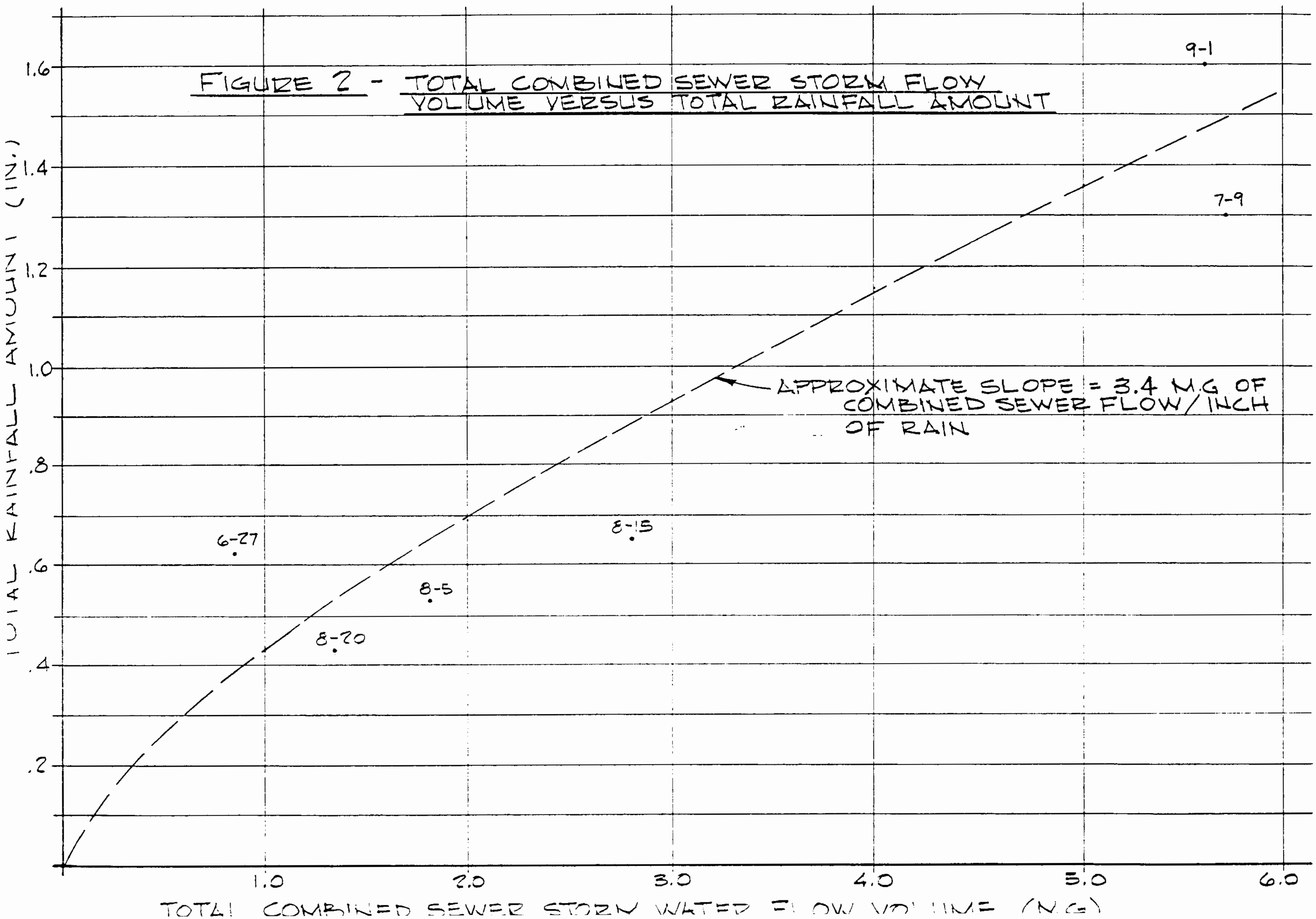
FIGURE 2 - TOTAL COMBINED SEWER STORM FLOW VOLUME VERSUS TOTAL RAINFALL AMOUNT
APPROXIMATE SLOPE = 3.4 M.G OF COMBINED SEWER FLOW/INCH OF RAIN
9-1
7-9
8-15
6-27
8-5
8-20
1.6
1.4
1.2
1.0
.8
.6
.4
.2
1.0
2.0
3.0
4.0
5.0
6.0
TOTAL RAINFALL AMOUNT (IN.)
TOTAL COMBINED SEWER STORM WATER FLOW VOLUME (M.G)

These plant bypass concentrations should be compared with the average plant inlet flow concentrations of 104 mg/l $CBOD_5$ and 112 mg/l TSS for the period from April 4, 1989 through April 28, 1989. This comparison indicates that the plant bypass flow (CSO) strength concentrations equal or exceed those of the average plant inlet flow, particularly regarding TSS. This fact is further illustrated by Table 3 on the following page which presents the 1987 and 1988 LaPorte wasteater treatment plant influent flow concentrations for both bypass and non-bypass days.

All of the LaPorte wastewater treatment plant bypassing enters a retention pond, which consequently overflows into Travis Ditch. The retention pond acts like a waste stabilization lagoon and provides solids settling and natural decomposition of the plant bypass flow.

TABLE 3 - LAPORTE WASTEWATER TREATMENT PLANT INFLUENT FLOW STRENGTH

MONTH	CBOD5 (mg/l) (Rain) BYPASS DAY			CBOD5 (mg/l) NON-BYPASS DAY			TSS (mg/l) (Rain) BYPASS DAY			TSS (mg/l) NON-BYPASS DAY		
1987	**MAX**	**AVE**	**MIN**	**MAX**	**AVE**	**MIN**	**MAX**	**AVE**	**MIN**	**MAX**	**AVE**	**MIN**
JAN	–	–	–	166	128	96	-	-	-	201	126	47
FEB	104	104	104	160	124	89	204	204	204	151	115	79
MAR	130	116	98	180	128	94	138	109	73	184	113	78
APR	140	111	82	192	139	104	232	147	96	143	100	67
MAY	149	112	62	182	130	70	322	150	65	160	96	55
JUNE	164	112	55	142	113	80	262	124	53	160	99	56
JULY	168	108	81	171	111	80	129	110	94	168	92	53
AUG	162	105	54	212	132	85	140	89	49	348	111	49
SEPT	124	86	65	335	156	90	168	105	60	408	117	64
OCT	350	133	82	228	155	111	270	125	63	246	122	77
NOV	200	148	96	218	164	129	222	134	84	194	120	86
DEC	146	117	92	195	143	80	150	118	55	160	106	67
YEARLY AVE.	167	114	79	198	135	92	203	129	81	210	110	65
1988												
JAN	77	77	77	210	144	64	108	108	108	200	114	68
FEB	208	123	92	182	130	92	186	128	84	186	106	68
MAR	128	99	70	252	160	110	164	109	54	324	133	88
APR	138	83	31	170	115	50	167	134	88	160	98	56
MAY	157	129	105	192	117	63	276	158	80	225	112	66
JUNE	118	110	105	211	129	37	150	121	64	371	120	59
JULY	118	105	96	220	148	96	168	140	78	160	109	62
AUG	195	131	79	193	133	88	232	145	68	188	98	25
SEPT	167	129	102	187	137	98	133	103	70	794	147	64
OCT	135	86	60	312	175	110	165	103	68	238	127	82
NOV	171	100	62	239	133	67	188	91	46	284	112	56
DEC	85	85	85	273	162	71	142	142	142	342	130	61
YEARLY AVE.	141	105	80	220	140	79	173	123	79	289	117	63

III.3 INDUSTRIAL AREA SURFACE DRAINAGE

Field surveys of each industrial area in LaPorte have been conducted to determine the amount of surface drainage into the LaPorte combined sewer system and any contamination potential thereto. The locations of these industries are indicated on Item C in the Appendix and an index of these industries is included in the Appendix as Item F. The summary of these industrial drainage surveys is presented in Table 4 on the following pages.

III.4 BUSINESS AND COMMERCIAL PARKING LOT DRAINAGE

Field surveys of each large business and commercial parking lot were made to determine the amount of surface drainage into the LaPorte combined sewer system. The results of these surveys are presented in Table 5 on the following pages.

III.5 ROOF DRAINAGE

The Infiltration/Inflow Survey which the City of LaPorte completed in 1976 determined that 35% of the residences in LaPorte have their roof drains connected to the combined sewer system. This number has decreased since 1976, with enforcement of the City Sewer use ordinance as problems occurred. However, the present percentage of roof drain connections is not known. Furthermore, as mentioned in Section II.7 of this report, the City has revised their sewer use ordinance to allow the continued connection of roof drains to their combined sewer system. As there are no remaining regular sewer flooding areas in LaPorte and as a retention pond exists to receive CSO, the further elimination of roof drains from the combined sewer system is not necessary.

TABLE 4 - SUMMARY OF INDUSTRIAL AREA SURFACE DRAINAGE SURVEY

	INDUSTRY NAME	ROOF AREA DRAINED TO COMBINED	PARKING LOT AREA DRAINED TO COMBINED	POTENTIAL DRAINAGE CONTAMINANTS	SOURCES OF POTENTIAL CONTAMINANTS	ON-SITE DRAINAGE DISPOSAL PERCOLATION	ON-SITE DRAINAGE DISPOSAL RET'N	PLANT WASTEWATER DISCHARGE SEWER LOCATION	PLANT WASTEWATER DISCHARGE SEWER SIZE	COMMENTS
1.	Allis Chalmers (Abandoned)	0	0	NA	NA		X	NA	NA	Retention Pond overflows to Clear Lake
2.	Alpha Baking	0	0	None	NA		X	St.Rte.2	24"	Retention Pond for roof drainage. Parking Lot Drains to a Marshland to the West.
2a.	American Home Foods Plant No. 2	0	0	None	NA			Fail Rd.	8"	All Drainage toward a Marshland to the West.
3.	American Metal Products	0	0	None	NA		X	Koomler Dr.	10"	Retention Ponds are Dry.
4.	Berkel, Inc.	1.0A	.7A	None	NA			Whirlpool Drive	18"	1/2 of Building Roof and Parking Lot Drains to Street Inlets.
5.	Boise Cascade	3.6A	2.1A	None	NA			Lincolnway	24"	No Potential to Retain Site Draina
6.	Hedwin Corporation	0	0	None	NA		X	Lincolnway	30"	Retention Pond Size is 200 X 80'
7.	Howmet Corporation	3.4A	0	None	NA			Lincolnway	24"	Old Bldg. Roof Drains are directl connected. Parking Lot Drains to a Ditch to the South.
8.	National Can Corp.	0	0	None	NA		X	Fail Rd.	8"	Retention Pond Provided.
9.	Teledyne Casting	0	0	Grit	Sand Castings	X		Ridgeway St.	36"	Surface Drainage is into Drywells on Philadelphia St.
10.	Accurate Casting	0	0	None	NA			Koomler Dr.	10"	Surface Drainage to a Low Area East of Parking Lot.
11.	American Rubber Co.	0	0	None	NA	X		Brighton St.	10"	Surface Drainage is into Drywells in Parking Lot.
11a.	Recticel Foam	0	0	None	NA	X	X	Darlington St.	10"	Parking Lot Partially Drained by Drywell and partially into a ditcl which runs into a small pond that is shared with Arrow Metals.
12.	Bonnie Baking	1.0A	1.3A	None	NA		X	Boyd Blvd.	48"	Portion of Parking Lot drains to Retention Pond and a portion to 48" Sewer. Same for roof.
13.	Coca-Cola Bottling (Abandoned)	.6A	0	None	NA	X		Rumely St.	21"	Parking Lot has 1 Dry Well.
14.	PPT (Formerly Conrad Corp.)	.1A	NA	None	NA			Factory St.	15"	50% of Roof is Connected to Combir Sewer. Parking Lots are Gravel.

NOTE: A = acres

TABLE 4 - SUMMARY OF INDUSTRIAL AREA SURFACE DRAINAGE SURVEY

INDUSTRY NAME	ROOF AREA DRAINED TO COMBINED	PARKING LOT AREA DRAINED TO COMBINED	POTENTIAL DRAINAGE CONTAMINANTS	SOURCES OF POTENTIAL CONTAMINANTS	ON-SITE DRAINAGE DISPOSAL PERCOLATION	RET'N	PLANT WASTEWATER DISCHARGE SEWER LOCATION	SITE	COMMENTS
15. Teter Tool & Die	0	NA	None	NA			Washington St.	10"	Near Downtown Location.
16. Mechanovent, Inc.	0	0	None	NA			Whirlpool Dr.	15"	Surface Drainage is into Storm Sewer System.
17. Whirlpool	0	0	None	NA		X	Whirlpool Dr.	15"	Surface Drainage is into Retentio Pond.
18. CBC Drilling	0	0	None	NA			Boyd Blvd.	48"	Surface Drainage is to Back and Also Road Ditches.
19. LaPorte Foundary (Abandoned)	0	0	None	NA		X	Truesdell Ave.	12"	
20. Industrial Pattern Works	0	0	None	NA			Koomler Dr.	10"	Surface Runoff to the East.
21. LaPorte Herald Argus	.2A	NA	None	NA			Monroe St.	10"	Downtown Location.
22. Harrison Engine	0	NA	None	NA			Pulaski St.	12"	Auto Storage Area is Unpaved.
23. Erincraft	0	0	None	NA		X	Truesdell Ave.	12"	Retention Pond Overflows to Clear Lake
24. Old Whirlpool Bldg.	4.1A	NA	None	NA			Factory St.	36"	
25. Midwest Industrial Bldg.	0	0	None	NA	X		Lake St.	12"	Surface Drainage is into a Drywal In the Parking Lot.
26. Modine Manufacturing Co.	3.5A	0	None	NA	X		Factory St.	36"	Parking Lot has Drywells.
27. New York Blower Co.	0	0	Solvents	Storage Bins	X		Factory St.	15"	Parking Lot has Drywells and Solve are stored Nearby.
28. Field Container	0	0	None	NA		X	Koomler Dr.	10"	Retention Ponds are Dry.
29. Kingsley Furniture	0	0	None	NA			Park St.	10"	Surface Drainage is directly into Clear Lake.
30. Arrow Metals	0	0	None	NA		X	Darlington Lift Sta.	10"	Parking Lot Drains into Small Retention Pond Shared with Recticel Foam.
31. Powcote	0	0	None	NA		X	Truesdell Ave.	10"	Parking Lot Drains into Retention Pond.

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32.	U.S. Packing Corp.	.1A	NA	None	NA		Clay St.	10"	Downtown Location.
33.	Thanhardt-Burger Corporation	0	NA	None	NA		Washington St.	10"	Downtown Location.
34.	Maple City Baffle	.2A	0	None	NA	X	Washington	12"	Downtown Location. Parking Lot has Drywell.
35.	Hoosier Hydraulics	.1A	.8A	None	NA		Ridgeway St.	36"	Entire Area Drains into Catch Basin on Daytona St.
	TOALS	17.9A	4.9A						

TABLE 5 - LARGE BUSINESS AND COMMERCIAL PARKING LOT SURFACE DRAINAGE SUMMARY

Parking Lot Description	Location	Roof & Paved Area Drained To Combined Sewer	On-Site Drainage Disposal: Percolation	On-Site Drainage Disposal: Retention	Comments
Maple Lane Mall	St.Rte. 2 West	12.8A Direct	Yes	No	"Fench drain" sewers for all roof and inlet drains and with direct gravity flow connections to 30" sewer on Andrew Ave. Vast majority of storm water flows thus enter 30" sewer.
Quick's Lanes & LaPorte Cinema & NIPSCo.	Colfax Ave.	2.7A Indirect	Partial	Partial	N.W. corner of parking lot has dry-well. S.W. corner of parking lot including a part of NIPSCo. drains into pond west of parking lot. East half of parking lot including a part of NIPSCo. drains to Colfax with catch basins provided at railroad.
Krogers & Kabelins	St. Rte. 2 West & Andrew Ave.	0	Yes	No	South half of parking lot has drywells. North half of parking lot has drywells and over flow "french" drain.
Rudd's-Goodyear	Lincolnway West from California St. to Fildes St.	0	No	No	Parking lot drains to State St. where surface percolation occurs as drainage inlets are ineffective due to their locations.
LaPorte Hospital: Upper level lots	Lincolnway & Chicago St.	0	Partial	No	One drywell in parking lot.
	Chicago & Washington Sts.	0	No	No	Inlets connected to storm sewer on Madison St.
	Madison St.	0	Partial	No	One drywell and one inlet connected to storm sewer.
	Washington St.	0	Yes	No	Two drywells.
	Tyler & Washington St.	0	No	No	East lot has 1 drywell & west lot has 2 drywells.
Lower level lot	Madison & Washington St.	0	No	No	Storm water pumping into Madison St. storm sewer.
Danners & Family Dollar	Lincolnway East and Boston St.	3.9A Direct	No	No	Inlets are directly connected to 36" combined sewer on York St.
Al's East	Lincolnway East and York St.	0	Yes	No	Parking lot has drywells.
LaPorte High School: West Lot	"I" St. & 6th St.	0	Yes	No	"French" drain for all parking lot inlets.
East Lot	West of "F" St.	.5A Direct .5A Indirect	Partial	No	North part of parking lot drains to "F" St. Middle part of parking lot drains to 2 drywells with "french" drain in between South part of parking lot drains to entry way grate which drains to catch basin on "F" St. Southwest part of parking lot has 2 drywells with "french"drains.
Kesling Middle School	18th Street	0	0	Yes	Storm sewer system for all inlets discharges into a pond south of 18th St. and west of "A" St.
Hook's	18th Street & "A" Street	0	0	0	Two inlets on east side of parking lot are connected to storm sewer on 18th St.

NOTE: A = acres

Parking Lot Description	Location	Roof & Paved Area Drained To Combined Sewer	On-Site Drainage Disposal Percolation	On-Site Drainage Disposal Retention	Comments
Bernacchi's Farm Market	Monroe St.	.6A Direct .5A Indirect	Partial	No	Northeast corner of parking lot has 2 drywells. Northwest corner of parking lot has drywell with overflow to parking lot catch basin at Monroe St. Remaining of parking lot drains to inlets that are directly connected to 10" combined sewer on Monroe Street.
City of LaPorte	Lincolnway and Monroe St.	0	Yes	No	Parking lot has one drywell.
City of LaPorte	Jackson St. and Jefferson Ave.	.3A Indirect	No	No	Parking lot surface drains to Jefferson Ave. and Jackson St.
5 Star-Burger King	St. Rte. 2 from Andrew Ave. to "J" Street	0	No	Yes	Storm sewers for all inlets discharge into a pond at the South-corner of this area.
	TOTALS	17.8A Direct 4.0A Indirect			

III.6 OTHER DRAINAGE

The field work for this project discovered the following additional confirmed or suspected drainage into the LaPorte combined sewer system.

1. Southeast corner of municipal golf course and the adjoining marshland were confirmed to drain into the 48" combined sewer.

2. The private ponds east of the municipal golf course are suspected to drain into the 48" combined sewer.

IV. IMPROVEMENT ALTERNATIVES FOR COMBINED SEWER SYSTEM

IV. GENERAL

The combined sewer system improvement alternatives considered in this PLAN are in accordance with U.S.E.P.A.'s "Technical Guidance for Use in the Development of a Combined Sewer Operational Plan". The consideration of each alternative includes the resulting costs. The implementation procedures for recommended alternatives are discussed in the following sections.

IV.2 MAINTENANCE OF COMBINED SEWERS AND CATCH BASINS

This alternative should include the transferring of these responsibilities from the City Street Department to the City Sewage Department. Furthermore, the sewer and catch basin maintenance costs should be derived from the sewage department's sewer usage rates and not from property taxes. The maintenance of the sanitary and combined sewers and catch basins is clearly within the jurisdicton of the City Sewage Department. The maintenance of the city storm sewers could remain a responsibility of the City Street Department or this could also be transferred to the City Sewage Department.

Preventive maintenance of combined sewers and catch basins will require an on-going maintenance schedule to prevent the occurrence of problems. In addition, the "first-flush" effects of the LaPorte combined sewer system, as discussed in Section III.1 of this report, will be greatly reduced by this preventive maintenance. The estimated personnel and equipment requirements of a preventive maintenance program for the LaPorte combined sewer system is presented in Table 6 on the following page.

IV.3 MORE FREQUENT STREET CLEANINGS

Street cleaning should remain a responsibility of the City Street Department. If the LaPorte City streets are cleaned adequately for vehicle convenience, this should be adequate for combined sewer purposes also. Street cleaning should keep dirt as well as sand from accumulating. Dirt is not removable by the catch basins and not all of the sand is either, depending on the rate of flow through the catch basin. These materials will thus enter the combined sewer system and the treatment plant or retention pond.

No additional costs are estimated for street cleaning. The City Street Department should be able to devote additional manhours to street cleaning as a result of the recommended elimination of their sewer and catch basin cleaning responsibilities.

TABLE 6 - COMBINED SEWER AND CATCH BASIN PREVENTIVE MAINTENANCE EQUIPMENT AND MANPOWER AND ESTIMATED COSTS

REQUIRED ITEMS	ESTIMATED COSTS Purchase/Repair	O,M & R*	Payroll**
Materials:		$5,000/Yr.	
Equipment:			
Hydraulic jet and vacuum truck (new)	$125,000	$30,000/Yr.	
Sewer rodding machine (existing)	0	2,500/Yr.	
Air compressor	10,000	2,000/Yr.	
Outside Services by Contract:		$30,000/Yr.	
Personnel:			
1 - Collection System supervisor *** (promotion)			$5,000/Yr.
Two 1 - Operator ***			0
2 - Laborers/Truck Drivers			44,000/Yr.
1 - Secretary (part-time)			10,000/Yr.
TOTAL COST	$135,000	$69,500/Yr.	$59,000/Yr.

* Annual Operation, Maintenance and Replacement Costs
** Payroll Costs Include Fringe Benefits
*** Personnel Transferred from other City Positions

IV.4 SURFACE INFLOW CONTAMINATION CONTROL

Of the varous sources of pollution in urban stormwater runoff, as listed in Section III.1 of this report, only the spilled chemicals and contaminated residues in industrial areas appear to be controllable. The Section III.3 Industrial Area Surface Drainage portion of this report contains the field survey details in this regard. Based on these details only two potential surface drainage contamination problems exist in LaPorte and neither situation involves drainage into LaPorte's combined sewer system.

IV.5 SURFACE INFLOW RATE CONTROL

This alternative would involve the temporary retention of surface runoff flow on the ground and street surfaces by "throttling" the catch basins. Fortunately this alternative is <u>not</u> necessary in LaPorte as the City's combined sewers are of adequate capacity and any sewer flow rates in excess of the treatment plant capacity enter the retention pond and are thus delayed prior to overflowing into Travis Ditch.

It should be mentioned that the revisions to the LaPorte City sewer use ordinance include that "new construction tributary to the combined sewer (system) be designed to minimize or delay inflow contribution to the existing combined sewer (system)". Also, the typical drywell or percolation trench methods of handling the parking lot drainage in LaPorte provides inflow minimization and delay when the drywells or percolation trenches have overflow connections to the city combined sewer systems. Therefore, surface inflow rate control already exists in LaPorte and will continue to in the future.

IV.6 SURFACE INFLOW ELIMINATION

Existing sources of surface inflow into the LaPorte combined sewer system were discussed in the following report sections; III.3(Industrial Areas), III.4 (Parking Lots), III.5 (Roofs) and III.6 (Other). Based on the information presented in these sections, the possible elimination of existing surface inflow sources are considered in Table 7, which follows:

TABLE 7 - POSSIBLE ELIMINATION OF EXISTING SURFACE INFLOW SOURCES

INFLOW CATEGORY	INFLOW SOURCE	POSSIBLE ELIMINATION OPTIONS
1. Industries: Howmet Bonnie Baking	Roof Areas	Disconnect roof drains from the combined sewer system and discharge into available ground area
2. Industries: Boise Cascade Bonnie Baking	Parking Areas	Disconnect the catch basins from the combined sewer system and replace with drywells.
3. Municipal & Commercial Parking Lots: Danners-Family Dollar LaPorte H.S.-East Lot	Parking Areas	Disconnect the catch basins from the combined sewer system and replace with drywells.
Bernacchi's Farm Market Maple Lane Mall		Revise the "french drain" sewer connections to the 30" Andrew Ave. sewer from direct gravity flow type to overflow type to allow the "french drain" sewers to function and percolate mall drainage flow into the ground.
4. Other Drainage: S.E. Corner of Golf Course		Pump this drainage directly to Travis Ditch.
Private Ponds East of Golf Course		Locate and plug these possible pond drainage connections to 48" combined sewer.

IV.7 COMBINED SEWER SYSTEM STORAGE OF WET WEATHER FLOWS

The storage of wet weather flows in the existing LaPorte combined sewer system would require modifications to the plant inlet junction structure bypass weir and the plant inlet flow control gates.

The inlet junction structure bypass weir would have to be raised a considerable height to accomplish wet weather flow storage in the plant inlet sewers. Presently, the top of this weir is only 1.25 ft. above the invert elevations of the 36", 48", and 60" plant inlet sewers and also is 1.1 ft. below the invert elevation of the 78" plant inlet sewer. Based on these elevation differences and the slopes of the inlet sewers, the resulting flow storage volumes are estimated and presented in Table 8 for different weir raising heights.

TABLE 8 - PLANT INLET BYPASS WEIR RAISING EFFECTS ON COMBINED SEWER FLOW STORAGE

WEIR RAISING HEIGHT (FT.)	RESULTING COMBINED SEWER FLOW STORAGE VOLUME (GAL) 36"	48"	60"	78"	TOTAL
1.0	19,900	25,900	86,800	0	132,600
2.0	48,300	74,000	248,400	6,700	377,400
3.0 *	83,400	137,000	468,600	37,700	726,700
4.0 *	116,500	193,400	734,300	108,000	1,152,200
5.0 *	149,500	256,100	968,000	200,100	1,573,700

* These weir raisings would require the walls and top slab of the plant inlet structure to be raised.

These estimated total combined sewer flow storage volumes are quite small when the following items are considered:

1. The estimated plant bypass retention pond volume of 16,000,000 gallons.

2. The estimate of 3,400,000 gallons of combined sewer storm water flow volume per inch of rain, from Figure 2 on page III-5.

In addition to the relatively small amount of storage volume in the plant inlet combined sewers, this procedure has these other disadvantages:

1. Solids deposition from flow stoppage or even backward flow during wet weather periods could result in regular sewer maintenance problems on one or more of these plant inlet sewer lines.

2. The plant influent junction structure bypass weir would have to be raised with a reinforced metal weir at an estimated cost range of $3,000 - $30,000. If the bypass weir is raised more than 2 feet, the walls and top slab of the structure would have to be raised at an estimated cost of $65,000.

3. The plant influent gate would have to be automated to "throttle" the plant flow rate during periods of plant influent junction structure and plant inlet sewer surcharging, at an estimated cost of $25,000.

Finally, the plant bypass retention basin would still be required as flow storage in the plant inlet combined sewers would only store a portion of the flow from most rainfall events.

IV.8 MAXIMIZE WET WEATHER FLOW RATE THRU TREATMENT PLANT

The maximization of wet weather flow rates through the LaPorte wastewater treatment plant can involve; (1) an increased flow rate from the combined sewer system and/or (2) a return flow rate from the retention pond. Option (1) is presently possible if the plant inlet gate is left open. Option (2) is presently hindered because no flow return facilities exist and the treatability of the retention pond contents by the treatment plant is unknown. The retention pond treatability question involves the suspended algae in the pond water. Option (2) would also stop the retention pond from overflowing in dry-weather.

Option (1) Discussion:

The rated or design capacity of the LaPorte wastewater treatment plant is 7.0 mgd. The maximum effective pumping rate through the plant is 9 mgd. To date, the plant has operated satisfactorily during the periods when the flow rate was 9 mgd, however, these time periods have all been relatively short in duration. Extended periods of high plant flow rates should be investigated to determine if these high plant flow rates will cause the plant effluent to deteriorate below N.P.D.E.S. permit requirements.

Only operating experience can determine the wet weather flow rate capacity for the LaPorte wastewater treatment plant. Existing plant operating records are unusable for this purpose as they indicate only average daily data. Therefore, a special plant sampling and testing program is required during extended high flow (7-9 mgd) periods at the LaPorte treatment plant to determine maximum wet weather flow rate for the plant. This program should include a time-sequence of grab samples and analysis for temperature, $CBOD_5$, TSS and NH_3-N concentrations for the plant influent and effluent flows. This time sequence should reflect the flow time between plant influent and effluent.

These concentrations can then be compared to the corresponding plant flow rates. This data should be obtained from a sufficient number of high plant flow periods, in both warm and cold periods of the year, to allow accurate graphical determination of the maximum seasonal wet weather plant flow rates. This special plant sampling and testing program should be performed during all prolonged rainfall events that cause high combined sewer flow rates, as these events are usually infrequent.

Option (2) Discussion:

The return of flow from the bypass retention basin would require a pumping and piping system. This system would also require automation if the return flow rates are controlled by the treatability limits of the return flow. This type of return flow system would be very expensive and is not necessary or cost-effective. Rather, a manually controlled return flow system, for the purpose of preventing the bypass retention basin from overflowing in dry weather, would be sufficient. This system could be small in capacity and even portable to accomplish its intended purpose.

IV.9 SEWER FLOW DETERMINATION AND BILLING FOR CUSTOMERS WITH LARGE INFLOW AS AN ALTERNATIVE TO ELIMINATION

The work presented in Sections III.3 and III.4 determined if any large sources of surface drainage inflow are connected directly or indirectly to the LaPorte combined sewer system. The possible elimination of these large inflow sources was considered in Section IV.6. An alternative to elimination would be determination of inflow volume and the billing for the same. Inflow volume could be determined by either (1) a sewer flow meter or (2) the measured hard-surface runoff area multiplied by the official National Weather Service precipitation data collected at the LaPorte water plant. The billing for this inflow volume would require a legal determination concerning the ability to charge only the large sources for inflow. It would be extremely difficult to implement a procedure to charge all sources for inflow.

IV.10 SURFACE DRAINAGE PONDING AREA SOLUTIONS

The causes of the temporary surface drainage ponding problems listed in Section II.4 of this report were investigated during wet weather flow events. The findings and recommendations are presented in Table 9 which follows.

TABLE 9 - SURFACE DRAINAGE PONDING AREA PROBLEMS AND SOLUTION

PONDING AREA	PROBLEM DESCRIPTION	PROBLEM SOLUTION
"F" St. between 8th and 10th St.	Inadequate combined sewer capacity	Connect 10" sewer on "F" St. with 12" sewer on "E" St. with new 12" sewer on 8th St. This will increase the present sewer draining capacity by apprcximately 260%.
Under R.R. viaduct on 1st St.	Inadequate number of drainage inlets	Install additional drainage inlets and connect to 24" storm sewer
Brighton St. and Rush St.	Inadequate combined sewer capacity	Provide a 10" relief sewer from this intersection manhole on the 10" sewer on Brighton St. to a manhole appoximately 110 feet south on Rush St., which is on another 10" sewer. This will increase the present sewer draining capacity by approximately 180%
6th St. West of "J" St.	No drainage inlets in low area	New drywell appears to have solved problem but additional drywells should be added.
Rockwood and Truesdell St.	Inadequate combined sewer capacity	Disconnect all drainage inlets from 10" combined sewer and reconnect to 18" storm sewer
Darlington St.	No drainage inlets due to santiary sewer and lift station for this street	Provide drywells in the ponding areas.

PONDING AREA	PROBLEM DESCRIPTION	PROBLEM SOLUTION
Lincolnway East	Inadequate combined sewer capacity	Extend storm sewer system on both sides of Lincolnway and disconnect existing surface drainage inlets from combined sewers and reconnect the inlets to the new storm sewers
Corvette Drive between "I" St. and Mustang Dr.	Inadequate combined sewer capacity	Reconnect existirg catch basins to larger sewer on "I" Street.
Monroe Manor West of Boyd Blvd.	Inadequate combined sewer capacity	Relieve the subdivision sewer system to the 60" combined sewer on Boyd Blvd.

V. SUMMARY, FINDINGS AND CONCLUSIONS AND RECOMMENDATIONS

The results of the Phase I and Phase II work are summarized and the necessary conclusions and recommendations are presented in this Section.

V.I. SUMMARY

This Combined Sewer Operation Plan (PLAN) for LaPorte, Indiana considered the following aspects of the City's combined sewer system:

1. Extent and layout of the system.
2. Retention and treatment provided for system flows.
3. Specific system problems.
4. Maintenance and control of the system.
5. Regulations governing the system.
6. Sources of pollution to the system.
7. Wet weather flow monitoring and sampling of the system.
8. Industrial drainage into the system.
9. Business and commercial parking lot drainage into the system.
10. Roof drainage into the system.
11. Other drainage into the system.

This PLAN also considered the following alternatives for improving the LaPorte combined sewer system operation and maintenance:

1. Transfer these responsibilities from the City Street Department to the City Sewage Department.

2. Provide additional equipment and personnel for this purpose.

3. Contamination and rate control and elimination of drainage into the system.

4. Additional storage and treatment of system wet weather flows.

5. Monitoring and billing for storm water drainage into the system.

Based on the preceding work, findings and conclusions and recommendations have been made and are presented in the following sections.

V.2. FINDINGS AND CONCLUSIONS

The City of LaPorte is sewered primarily by combined sewers. This situation is expected to continue in the future due to the lack of natural drainage in the City. Future additions to the LaPorte sewer system will probably include percolation and retention of storm water drainage and possibly controlled rate discharge into the existing combined sewer system. Other findings and conclusions from the PLAN are:

1. The capacity of the combined sewer system in LaPorte is adequate for the present size of the City except in a few isolated areas.

2. The majority of the industrial and parking areas in LaPorte are not connected to the City's combined sewer system. The areas that are connected are not overloading the system.

3. If additional combined sewer capacity is ever needed in LaPorte, the removal of connected industrial and parking areas, as indicated in Table 7 on page IV-3 and roof drains could be considered as an alternative to constructing additional sewers.

4. Roof drainage into the LaPorte combined sewer system can remain as long as the sewer capacity is adequate.

5. No points of contamination of surface drainage into the LaPorte combined sewer system presently exist.

6. Rate control of drainage into the LaPorte combined sewer system presently exists where necessary.

7. The existing LaPorte wastewater treatment plant bypass retention pond is the most effective means of retaining combined sewer system wet weather flows.

8. The increase of flow through the LaPorte wastewater treatment plant is the most cost-effective method of maximizing the treatment of combined sewer system wet weather flows. The return of flow from the bypass retention basin for treatment is also necessary, to prevent the basin from overflowing in dry weather.

9. The other sources of drainage into the LaPorte combined sewer system which were discovered during this work are of long-term duration. One of these sources is city property, Beechwood Golf Course and no other means of draining this area is available. The other area is a private pond whose overflow is suspected to be connected to the 48" combined sewer at the east edge of the golf course.

10. Additional equipment and personnel are required for maintenance of the LaPorte combined sewer system.

11. The City of LaPorte has adequate legal authority to regulate their combined sewer system.

12. Wet weather flow and rainfall monitoring has determined that the LaPorte combined sewer flows respond to rainfall rates and amounts as follows:

Total Combined Sewer Storm Flow Rate	=	25 MGD/IN/HR of rainfall intensity for up to .25 IN/HR and 200 MGD/IN/HR for above . 3 IN/HR
Total Combined Sewer Storm Flow Volume	=	3,400,000 gallons/inch of rain

Furthermore, these storm flows are distributed between the four combined sewers entering the LaPorte wastewater treatment plant as follows: 36" sewer - 8%, 48" sewer - 23%, 60" sewer - 6%, and 78" sewer - 63%.

13. The concentration time of storm water flow at the LaPorte wastewater treatment plant is one hour, i.e., one hour after it starts to rain in LaPorte, the treatment plant flows start to increase as a result.

14. The strength of combined sewer wet weather flows in LaPorte is significant, especially concerning suspended solids.

15. The monitoring and billing of only the large contributors of storm water to the LaPorte combined sewer system is not equitable, regardless of its legality.

V.3 RECOMMENDATIONS

Based on the findings and conclusions of the PLAN, the following recommendations are made in order of declining priority:

1. Transfer the operation and maintenance responsibilities of the combined sewer system and catch basins from the City Street Department to the City Sewage Department.

2. Provide the additional equipment and personnel for system operation and maintenance as presented in Table 6 on Page IV-2, as funds become available.

3. Determine the maximum wet weather flow rate through the wastewater treatment plant as outlined under Option (1) in Section IV.7 on pages IV-5 and 6.

4. Provide a manually controlled portable pumping and piping system to return flow from the bypass retention basin for treatment, as necessary, to prevent the basin from overflowing in dry weather.

5. Investigate the suspected private pond connection to the combined sewer at the east edge of Beechwood Golf Course. If verified, either eliminate this connection or establish a metering and billing procedure with the pond owner for the treatment of this water.

6. Implement the solutions to the existing surface drainage ponding areas contained in Table 9 on pages IV-7 and 8, based on cost-to-benefit determinations.

VI. IMPLEMENTATION SCHEDULE FOR RECOMMENDATIONS

An implementation schedule for the PLAN recommendations shall be completed within one year, if possible, following State approval of the PLAN. Some of the PLAN recommendations can proceed prior to State approval and other should be subject to State approval. A suggested implementation schedule for the PLAN recommendations is presented as follows:

DATE	IMPLEMENTATION DESCRIPTION
November, 1989	1. Review and revise the PLAN as necessary.
December 1, 1989	1. Approve the PLAN and submit it for State approval. 2. Begin legal and administrative procedures to implement PLAN recommendation No. 1. 3. Begin financial budgeting for PLAN recommendation No. 2. 4. Begin the PLAN recommendation No. 3 investigation. 5. Begin the cost-to-benefit ratio determinations of PLAN recommendation No. 6.
March 1, 1990	1. Estimated date for State approval of the PLAN. 2. Complete PLAN recommendation No. 1. 3. Begin purchasing the equipment and hiring the personnel for PLAN recommendation No. 2, as funds become available. 4. Implement PLAN recommendation No. 4.
May 1, 1990	1. Conduct the PLAN recommendation No. 5 investigation and begin any necessary follow-up procedures.
August 1, 1990	1. Complete the cost-to-benefit determinations of PLAN recommendation No. 6 and begin implementation as funds become available. 2. Complete any necessary follow-up procedures regarding PLAN recommendation No. 5. 3. Complete the PLAN recommendation No. 3 investigation and begin treating combined sewer wet weather flows at the maximum rate determined by this investigation.

DATE	IMPLEMENTATION DESCRIPTION
March 1, 1991	1. Continue implementing PLAN recommendation No. 2 as funds become available. 2. Continue implementing PLAN recommendation No. 5 as funds become available.
June 1, 1991	1. Submit implementation status report to IDEM.

ADDENDUM NO. 1
December, 1992

Prepared By: Haas & Associates
Consulting Engineers
Michigan City, Indiana
For

LA PORTE, INDIANA
COMBINED SEWER SYSTEM OPERATIONAL PLAN
October, 1989

ADDENDUM NO. 1
December, 1992

LaPORTE, INDIANA
COMBINED SEWER SYSTEM OPERATIONAL PLAN
October, 1989

I. INTRODUCTION

This Addendum No. 1 is in response to a June 19, 1992 letter from the Indiana Department of Environmental Management (IDEM) as a result of their review of the LaPorte, Indiana Combined Sewer System Operational Plan (PLAN). A copy of IDEM'S letter is included at the end of this addendum as Attachment No. 1.

II. FORMAT

The information presented in this Addendum is arranged as a response to each item in IDEM'S letter.

III. RESPONSE TO IDEM COMMENTS

IIIA. - Comment Item I.F
The referenced catch basin information is presently being obtained. It is hereby proposed that this work be completed during the 15 month implementation and report period for the PLAN, following IDEM approval. This information can be submitted with the required project status report, following the 15 month implementation and report period.

IIIB. - Comment Item I.C
As-built details of the LaPorte wastewater treatment plant influent structure and CSO weir and flow channel are included at the end of this addendum on Attachment No. 2. As-built details of the LaPorte wastewater treatment plant CSO retention pond spillway are included at the end of this addendum on Attachment No. 3.

IIIC. - Comment I.E
CSO retention basin water level is controlled by the spillway elevation which is approximately 4.7 feet lower in elevation than the CSO weir in the plant influent structure. Therefore, backflow from the retention basin is not possible.

IIID. - Comments I.H.I and I.K
The LaPorte wastewater treatment plant flows and performance have been analyzed for the entire year of 1991, for the purpose of determining the maximum wet weather flow rate through the plant. This determination is based on the premises that the maximum plant flow rate shall not; (1) cause a violation of the plant's N.P.D.E.S. permit effluent limits, (2) cause physical damage to the plant, (3) have a prolonged negative effect on any plant processes and (4) require significant improvements to the plant. Each of these premise items is considered as follows:

(1) NPDES permit violations for the LaPorte wastewater treatment plant are on an average monthly or weekly basis and not on a daily basis. Therefore, reductions in plant

effluent quality due to maximum wet weather flow rates will not result in permit violations unless the reduced plant effluent quality is extreme or prolonged enough to effect the plant effluent quality weekly average. Any resulting effect on the plant monthly average effluent quality is considered to be insignificant.

Weekly average limits in the LaPorte N.P.D.E.S. permit include CBOD, TSS and NH3-N, both for winter and summer conditions. As a result, LaPorte wastewater treatment plant data for 1991 was analyzed for each day in which a plant CSO occurred. The graphical representation of this data is presented on the following attachments at the end of this addendum:

Attachment No. 4 - Daily Plant Flow vs. Plant Effluent CBOD
Attachment No. 5 - Daily Plant Flow vs. Plant Effluent TSS
Attachment No. 6 - Daily Plant Flow vs. Plant Effluent NH3-N

The data presented on each attachment indicate summer and winter ranges and trends which when visually extended verify the plant's maximum rated capacity of 9-9.5 mgd. The attachments indicate that the plant's N.P.D.E.S. permit summer effluent limits for TSS will begin to be exceeded at this maximum design flow rate. However, as previously discussed, these short-term periods of plant effluent degradation should not result in weekly or monthly N.P.D.E.S. permit effluent limit violations. Therefore, other procedures must be used to determine the maximum wet weather flow capacity of the LaPorte wastewater treatment plant.

(2),(3)&(4) Due to the fixed growth type of bacteria in the LaPorte wastewater treatment plant, biological solids washout from high wet weather flows is not a problem. However, high flows can cause these other problems if the stated capacities are exceeded: (1) screenings being forced thru the inlet bar screen due to excessive flow velocities, maximum apparent capacity = 17 mgd, (2) flow meter range, maximum apparent capacity = 15 mgd, (3) grit carrythru the grit channels, due to excessive flow velocities, maximum apparent capacity = 12 mgd, (4) inadequate solids removal in the primary settling tanks due to excessive flow volumes, maximum apparent capacity = 12 mgd* (5) flooding of the trickling filters or inadequate treatment due to excessive flow volumes; rotary trickling filter rate = 5 mgd with one pump on and 7.5 mgd with two pumps on; fixed nozzle trickling filter rate = 4.5 mgd with two pumps on, (6) inadequate solids removal in the intermediate settling tanks due to excessive flow volumes, maximum apparent capacity = 9.5 mgd, (7) inadequate nitrification in biotowers due to excessive flow volumes; biotower rate = 14.1 mgd with 3 pumps on, (8) inadequate disinfection of plant effluent due to inadequate chlorine contact time, maximum apparent capacity = 9.5 mgd.

*with some improvements

Based on the preceding consideration of the LaPorte wastewater treatment plant unit capacities, the maximum wet weather flow rate thru the plant should be 9.5 mgd as limited by the intermediate clarifiers and chlorine contact tank and possibly the rotary trickling filter. The abilities of the rotary trickling filter distributor and media and the intermediate clarifiers to handle the additional flow with both influent pumps on are presently being determined.

IIIE. - Comment I.N

A list of all significant industrial dischargers to the LaPorte combined sewer system, a description of their wastewater parameter limits and any pretreatment facilities and a summation of the monitoring data on their discharges are provided on Attachment No. 7 at the end of this addendum. All industries and other sewer system dischargers in LaPorte are upstream of the CSO, which is located at the wastewater treatment plant.

IIIF. - Comment II

A combined sewer maintenance schedule is provided on Attachment No. 8 at the end of this addendum.

IIIG. - Comment III.A

A street and catch basin cleaning schedule is provided on Attachment No. 9 at the end of this addendum. The locations and details of the catch basins on the LaPorte combined sewer system are currently being determined by City forces as they clean and repair the catch basins. As proposed in Item IIIA of this Addendum, the location of all catch basins will be determined during the 15 month implement/report period for the PLAN and will be submitted with the project status report, following the 15 month implement/report period.

IIIH. - Comment IV.H

A study of the LaPorte wastewater treatment plant bypass (CSO) retention basin has been mandated by the enforcement section of IDEM and is presently in progress. This study includes the investigation of return pumping from the retention basin thru the treatment plant. Therefore, this comment will be answered as part of this other study.

III.I. - Comment V.B

As mentioned in Section III.D, the units of the LaPorte wastewater treatment plant that limit the maximum wet weather flow rate thru the plant to 9.5 mgd are the intermediate clarifiers, the chlorine contact tank and possibly the trickling filters. If it is determined that the rotary trickling filter can handle and effectively treat the flow with both influent feed pumps on and the intermediate clarifiers remain effective at the resulting increased plant flow rate, a wet weather plant flow rate of 12 mgd would be possible, if the chlorine contact tank is still effective. The limiting treatment plant units at a wet weather flow capacity of 12 mgd would then be the grit channels and primary clarifiers.

The preceding analysis of the capacities of the various units at the LaPorte wastewater treatment plant concurs with the projected plant effluent quality at higher plant flow rates, from Attachments No. 4, 5 and 6.

These attachments were based on plant operating data for 1991. It must be realized that the average plant flow rate in 1991 was 5.8 mgd or 83% of the average plant flow design capacity of 7.0 mgd. Also, the average plant influent CBOD and TSS loads in 1991 were approximately 35% of the plant design loads. Therefore, the maximum plant wet weather flow rate may have to be reduced in the future, as the average plant influent loadings increase. Nevertheless, at the present time, a wet weather maximum flow rate of 12 mgd appears possible at the LaPorte wastewater treatment plant, subject to verification and modification by actual plant experience during the 15 month PLAN implementation and status report period.

If it is determined that the wet weather flow capacity of the LaPorte wastewater treatment plant can be increased significantly, such as to 12 mgd, the following additional improvements will have to be made at the plant:

1. Raise the CSO weir in the plant influent structure approximately 1.5 feet in elevation.
2. Automate the sluice gate on the inlet to the plant bar screen structure with control by plant inlet flow rate.
3. Increase the speed of the plant inlet bar screen for faster cleaning.
4. Improve the grit channels to provide effective removal at the high flow rate.
5. Automate the second rotary trickling filter feed pump with control by plant inlet flow rate.

IIIJ. - Comment VI.B,C
The LaPorte wastewater facilities, including the combined sewer system, do not serve any other community.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor

Kathy Prosser
Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

June 19, 1992

The Honorable Elmo Gonzalez, Mayor
City of LaPorte
801 Michigan Avenue
LaPorte, Indiana 46350

Dear Mayor Gonzalez:

Re: Combined Sewer Overflow Operational Plan
LaPorte, Indiana

The Office of Water Management has reviewed the Combined Sewer Overflow Operational Plan (Plan) for The City of LaPorte received on December 6, 1989.

A copy of the Checklist used to review the Plan is enclosed with this letter. The Plan appears to be very well prepared and thorough. However, the Plan contained deficiencies that are listed below after the appropriate Checklist citation:

Item I.F — The Combined Sewer System Inventory did not include the location of catch basins that would facilitate inspection and cleaning. Is this information available at the Wastewater Treatment Plant (WWTP)?

Item I.C — The existing Combined Sewer Overflow (CSO) should have more documentation, such as drawings, technical specifications, map locations, etc..

Item I.E — It was not clear if the CSO had a flapgate or if it was located to prevent back flow from the retention basin.

Item I.H,I — Data on existing peak flows, both dry and wet weather, treated by the wastewater treatment plant should be provided. This data should include the design peak flow as well as the actual peak flow treated. Recommendation 3 in Section V.3 of the Plan asks the City of LaPorte to determine the maximum wet weather flow rate through the WWTP.

Item I.K — What are the limiting unit processes at the wastewater treatment plant which prevent the treatment of additional flow during wet weather? The recommended study in Section V.3 of the Plan should be able to answer this question.

ATTACHMENT NO. 1
ADDENDUM NO. 1
December, 1992

Item I.N Direct up-pipe industrial dischargers should be identified in the Plan. It is important to know if industrial toxics will be directly discharged to the receiving stream from industrial processes. A list of all direct dischargers to the combined sewer system (CSS) and if pretreatment is provided (Item III.B) will satisfy this requirement. Tables 4 and 5 in the Plan only list industries that may have a surface water drainage to the CSS.

Item II Item II of the Checklist refers to schedules for implementation of various sewer maintenance tasks. These schedules should be included in the Plan and should be sufficiently detailed such that new employees could properly maintain the system. Specific schedules for the inspection of combined sewers (Item II.A), overflows (Item II.B) and flapgates (Item II.C), along with schedules for sewer televising (if performed routinely) (Item II.D) and combined sewer cleaning and flushing (Item II.E) should be included in the Plan.

Item III.A A schedule for street, catch basin and regulator cleaning should be included in the Plan. If done often enough, this can reduce the loading to the wastewater treatment plant. The schedule should identify areas that might contribute excessive loadings, such as industrial areas. These areas should be cleaned more often.

Item IV.H The use of a manually controlled portable pumping and piping system to return combined sewer overflow from the bypass retention basin to the WWTP(as recommended in Section V.3.4 of the Plan) appears to be a cost-effective mechanism to prevent dry weather discharges and to treat additional wet weather discharges. If implemented, would this eliminate all dry and wet weather discharges?

Item V.B Can operations of any of the wastewater treatment plant unit processes be modified to process more flow?

Item VI.B, C Does LaPorte provide combined sewer service for other communities? If so, the sewer use contracts should be in place and enforced. The regionalized communities served by LaPorte should have equivalent sewer use ordinances.

Please submit a revised Plan to the Office of Water Management within 120 days of the date of this letter. If you have any questions, you may contact Mr. Terry F. Gray, at 317/232-8739.

Sincerely,

Lonnie Brumfield

Lonnie Brumfield, Chief
Permits Section
Office of Water Management

ATTACHMENT NO. 1
ADDENDUM NO. 1
December, 1992

Enclosure: Checklist

LISTING AND DESCRIPTION

OF

15 SIGNIFICANT INDUSTRIAL DISCHARGERS

INTO

COMBINED SEWER SYSTEM

LaPorte, Indiana

NOTES:

(1) Industries are listed in alphabetical order

(2) Only the industries in LaPorte which discharge process wastewater into the city sewer system are listed herein.

ATTACHMENT NO. 7
ADDENDUM NO. 1
December, 1992

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: ALPHA BAKING CO.
Address: 360 NORTH FAIL ROAD ST.: INDIANA ZIP: 46350
Company Representative: DICK BROWN
Products Produced Or Service Preformed: BREAD AND BUNS

Pretreatment Process: GREASE REMOVAL

Time of Operation: VARIABLE Shifts: 3 # Employees: 20

Classification: BAKERY

Permit #: 11
Account#1: MO1 04140-01
Account#2:
Account#3:

Typical Daily Flow (gpd): 30,528
Monthly Average Flow (gallons): 915,833

Discharge Parameters

BOD5	TSS	OIL&GREASE(T)	PH

Daily Parameter Limits : MG/L

BOD5 300	TSS 300	OIL&GREASE(T) 100	PH 6-9 S.U.

Average Parameter Discharge : MG/L

BOD5 390.4	TSS 118.1	OIL&GREASE(T) 29	PH 8.016

Information OIL & GREASE (T) - TOTAL OIL & GREASE

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: AMERICAN METAL PRODUCTS
Address: 105 KOOMLER DRIVE ST.: INDIANA ZIP: 46350
Company Representative: DAVID CHRISTIAN (OWNER)
Products Produced Or Service Preformed: CASKET HARDWARE

Pretreatment Process: CYANIDE DISTRUCTION; METAL REMOVAL; PH ADJUSTMENT

Time of Operation: 6AM - 11PM Shifts: 2 # Employees:

Classification: METAL FINISHER Permit #: 5
Account#1: MO1 04461-00
Typical Daily Flow (gpd): 70,111 Account#2: MO1 04460-00
Monthly Average Flow (gallons): 2,103,332 Account#3:

Discharge Parameters

: CADMIUM	: CHROMIUM	: COPPER	: LEAD
: NICKEL	: SILVER	: CYANIDE (T)	: CYANIDE (A)
: ZINC	: TSS	: OIL&GREASE(HC)	: PH
: TTO	:	:	:

Daily Parameter Limits : MG/L

: CADMIUM .69	: CHROMIUM 2.77	: COPPER 3.0	: LEAD .69
: NICKEL 3.98	: SILVER .3	: CYANIDE (T) 1.1	: CYANIDE (A).86
: ZINC 2.61	: TSS 300	: OIL&GREASE(HC) 50	: PH 6-9 S.U.
: TTO 2.13	:	:	:

Average Parameter Discharge : MG/L

: CADMIUM <.005	: CHROMIUM .0162	: COPPER 2.4622	: LEAD <.0014
: NICKEL .3797	: SILVER .0049	: CYANIDE (T) 2.38	: CYANIDE (A).06
: ZINC .088	: TSS <.05	: OIL&GREASE (HC)2	: PH 7.596
: TTO	:	:	:

Information CYANIDE (T) - TOTAL CYANIDE
CYANIDE (A) - CYANIDE AMENDABLE TO CHLORINE

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: AMERICAN NATIONAL CAN
Address: 300 FAIL ROAD ST.: INDIANA ZIP: 46350
Company Representative:
Products Produced Or Service Preformed: TIN CAN MANUFACTURING

Pretreatment Process: METALS REMOVAL; PH ADJUSTMENT; SOLIDS REMOVAL

Time of Operation: 24 HRS. Shifts: 3 # Employees:

Classification: COIL COATING;SUB-D CANMAKING Permit #: 3
Account#1: MO1 04170-00
Typical Daily Flow (gpd): 37,200 Account#2:
Monthly Average Flow (gallons): 1,116,000 Account#3:

Discharge Parameters

CHROMIUM	COPPER	ZINC	FLOURIDE
PHOSPHORUS	MANGANESE	OIL&GREASE(HC)	PH
	TTO		

Daily Parameter Limits : MG/M CANS

CHROMIUM 36.92	COPPER 159.41	ZINC 122.49	FLOURIDE 4992
PHOSPHORUS 1401	MANGANESE 57.05	OIL&GREASE(HC) 50	PH 6-9 S.U.
	TTO 26.85		

Average Parameter Discharge : MG/L

CHROMIUM .0233	COPPER .0071	ZINC .0222	FLOURIDE .9398
PHOSPHORUS 1.3084	MANGANESE .0134	OIL&GREASE(HC)3.2	PH 8.167
	TTO		

Information OIL & GREASE (HC) - HYDROCARBON FRACTION

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: DRESKE SILVER PLATING
Address: 702 RIDGEWAY ST.: INDIANA ZIP: 46350
Company Representative: DAVID CLAEYS
Products Produced Or Service Preformed: REFINISHING METAL

Pretreatment Process: RINSE TANKS;

Time of Operation: 8AM - 5PM Shifts: 1 # Employees: 2

Classification: ELECTROPLATING PRECIOUS METALS Permit #: 10
Account#1: C26 01810-00
Typical Daily Flow (gpd): 127 Account#2:
Monthly Average Flow (gallons): 3,800 Account#3:

Discharge Parameters

CYANIDE(A).6597	CADMIUM .0014	LEAD .0198	SILVER .0958
PH 7.89	TTO		

Daily Parameter Limits : MG/L

CYANIDE(A) 2.7	CADMIUM .7	LEAD .4	SILVER .3
PH 6-9 S.U.	TTO 4.5		

Average Parameter Discharge : MG/L

CYANIDE(A) .6597	CADMIUM .0014	LEAD .0198	SILVER .0958
PH 7.89	TTO		

Information CYANIDE (A) - CYANIDE AMENDABLE TO CHLORINE

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: HARRISON ENGINE SERVICE
Address: 301 DETROIT STREET ST.: INDIANA ZIP: 46350
Company Representative: MR.MATHIS
Products Produced Or Service Preformed: REPAIR AIRCRAFT ENGINES

Pretreatment Process: OIL REMOVAL; CLOSED PLATING SYSTEM

Time of Operation: 7AM - 11PM Shifts: 2 # Employees: 20

Classification: METAL FINISHER Permit #: 9
Account#1: MO1 0288-00
Typical Daily Flow (gpd): 127 Account#2:
Monthly Average Flow (gallons): 3,800 Account#3:

Discharge Parameters

: CADMIUM	: CHROMIUM	: COPPER	: LEAD
: NICKEL	: SILVER	: ZINC	: CYANIDE
: OIL&GREASE(HC)	: TSS	: PH	: TTO
:	:	:	:

Daily Parameter Limits : MG/L

: CADMIUM .69	: CHROMIUM 2.77	: COPPER 3.38	: LEAD .69
: NICKEL 3.98	: SILVER .43	: ZINC 2.61	: CYANIDE 1.1
: OIL&GREASE(HC)50	: TSS 300	: PH 6-9 S.U	: TTO 2.13
:	:	:	:

Average Parameter Discharge : MG/L

: CADMIUM .0041	: CHROMIUM .0845	: COPPER .1229	: LEAD .0355
: NICKEL .006	: SILVER .0009	: ZINC .1470	: CYANIDE .0021
: OIL&GREASE(HC) 2	: TSS 2.0	: PH 7.834	: TTO
:	:	:	:

Information OIL & GREASE (HC) - HYDROCARBON FRACTION

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: HOWMET LAPORTE CASTING
Address: 1110 EAST LINCOLNWAY ST.: INDIANA ZIP: 46350
Company Representative: MURRAL MILLER
Products Produced Or Service Preformed: JET ENGINE TURBINES

Pretreatment Process: SOILDS REMOVAL; SILVER RECOVERY; PH ADJUSTMENT

Time of Operation: 7AM - 3PM Shifts: 1 # Employees: 625

Classification: METAL MOLDING CASTING POINT Permit #: 6
Account#1: MO1 04100-00
Typical Daily Flow (gpd): 70,400 Account#2:
Monthly Average Flow (gallons): 2,112,000 Account#3:

Discharge Parameters

CHROMIUM	COPPER	LEAD	NICKEL
SILVER	ZINC	OIL&GREASE(HC)	PH
TTO			

Daily Parameter Limits : KG/MKG

CHROMIUM 24 MG/L	COPPER 3.19	LEAD 5.84	NICKEL 10.MG/L
SILVER .3 MG/L	ZINC 10.8	OIL&GREASE(HC)330	PH 6-9 S.U.
TTO 13.2			

Average Parameter Discharge : KG/MKG

CHROMIUM .0016	COPPER .2774	LEAD .0294	NICKEL 1.238
SILVER .0474	ZINC .5363	OIL&GREASE(HC)7.0	PH 7.595
TTO			

Information OIL & GREASE (HC) - HYDROCARBON FRACTION

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: JEFFERSON SMURFIT
Address: 1201 EAST LINCOLNWAY ST.: INDIANA ZIP: 46350
Company Representative: LARRY ST.JOHN
Products Produced Or Service Preformed: CARDBOARD BOXES; PRINTING

Pretreatment Process: COLOR REMOVAL; STARCH REMOVAL; PH ADJUSTMENT

Time of Operation: VARIABLE Shifts: 3 # Employees:

Classification: CARDBOARD ASSMBLEY & PRINTING Permit #: 8
Account#1: M01 04220-00
Typical Daily Flow (gpd): 21,604 Account#2: M01 04240-00
Monthly Average Flow (gallons): 648,116 Account#3:

Discharge Parameters

BOD5	TSS	OIL&GREASE(HC)	CYANIDE(T)
PH	COLOR		

Daily Parameter Limits : MG/L

BOD5 300	TSS 300	OIL&GREASE(HC)50	CYANIDE(T) 1.1
PH 6-9 S.U.	COLOR		

Average Parameter Discharge : MG/L

BOD5 1,064.4	TSS 124.7	OIL&GREASE(HC)26	CYANIDE(T).044
PH 8.236	COLOR		

Information OIL & GREASE (HC) - HYDROCARBON FRACTION
CYANIDE (T) - TOTAL CYANIDE

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: KEYSTONE SERVICE INC.
Address: 1500 GENESIS DRIVE ST.: INDIANA ZIP: 46350
Company Representative: MARV MITCHELL
Products Produced Or Service Preformed: CHROME PLATING SHAFTS

Pretreatment Process: NONE

Time of Operation: VARIABLE Shifts: 2 # Employees: 30

Classification: METAL FINISHER Permit #: 14
Account#1: MO1 04517-00
Typical Daily Flow (gpd): 3,857 Account#2:
Monthly Average Flow (gallons): 115,716 Account#3:

Discharge Parameters

: CADMIUM	: CHROMIUM	: COPPER	: LEAD
: NICKEL	: SILVER	: ZINC	: ARSENIC
: MERCURY	: SELENIUM	: CYANIDE(T)	: PH
: TTO	:	:	:

Daily Parameter Limits : MG/L

: CADMIUM .11	: CHROMIUM 2.77	: COPPER 3.0	: LEAD .69
: NICKEL 3.98	: SILVER .43	: ZINC 2.61	: ARSENIC 1.8
: MERCURY .15	: SELENIUM .2	: CYANIDE(T) 1.1	: PH 6-9 S.U.
: TTO 2.13	:	:	:

Average Parameter Discharge : MG/L

: CADMIUM .0013	: CHROMIUM .0393	: COPPER .3528	: LEAD .0125
: NICKEL .0143	: SILVER .0016	: ZINC .1995	: ARSENIC
: MERCURY	: SELENIUM	: CYANIDE(T) .0074	: PH 8.346
: TTO	:	:	:

Information CYANIDE (T) - TOTAL CYANIDE

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: LAPORTE PUBLISHING (HERALD ARGUS)
Address: 701 STATE STREET ST.: INDIANA ZIP: 46350
Company Representative:
Products Produced Or Service Preformed: LOCAL NEWS PAPER

Pretreatment Process: SILVER RECOVERY

Time of Operation: 6AM - 5PM Shifts: 1 # Employees:

Classification: NEWS PRINT Permit #: 2
Account#1: MO1 02430-00
Typical Daily Flow (gpd): 1,039 Account#2:
Monthly Average Flow (gallons): 31,166 Account#3:

Discharge Parameters

: SILVER	:	:	:
:	:	:	:
:	:	:	:
:	:	:	:

Daily Parameter Limits : MG/L

: SILVER .3	:	:	:
:	:	:	:
:	:	:	:
:	:	:	:

Average Parameter Discharge : MG/L

: SILVER	:	:	:
:	:	:	:
:	:	:	:
:	:	:	:

Information

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: LEWIS BAKING CO.
Address: 800 BOYD BLVD. ST.: INDIANA ZIP: 46350
Company Representative: GEORGE MITCHEM
Products Produced Or Service Preformed: BREAD AND BUNS

Pretreatment Process: OIL & GREASE REMOVAL; STARCH REMOVAL; PH ADJUSTMENT

Time of Operation: VARIABLE Shifts: 3 # Employees:

Classification: BAKERY

Permit #: 7
Account#1: MO1 04100-00
Account#2:
Account#3:

Typical Daily Flow (gpd): 9,639
Monthly Average Flow (gallons): 289,166

Discharge Parameters

BOD5	TSS	OIL&GREASE(T)	PH

Daily Parameter Limits : MG/L

BOD5 300	TSS 300	OIL&GREASE(T)100	PH 6-9 S.U.

Average Parameter Discharge : MG/L

BOD5 1,742.6	TSS 180.4	OIL&GREASE(T)31.3	PH 7.33

Information OIL & GREASE (T) - TOTAL OIL & GREASE

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: MARTIN OIL
Address: 1332 STATE ROAD 2 WEST   ST.: INDIANA ZIP: 46350
Company Representative: STEVE SCHROEDER
Products Produced Or Service Preformed: GROUND REMEDIATION

Pretreatment Process: AIR STRIPPING TOWER, FOR VOLTILE ORGANICS

Time of Operation: 24 HRS.   Shifts: # Employees:

Classification: GROUND REMEDIATION   Permit #: 4
Account#1: MO1 0038-00
Typical Daily Flow (gpd): 14,033   Account#2:
Monthly Average Flow (gallons): 421,000   Account#3:

Discharge Parameters

: BOD5	: CADMIUM	: CHROMIUM	: COPPER
: LEAD	: MERCURY	: NICKEL	: ZINC
: TTO	:	:	:
:	:	:	:

Daily Parameter Limits : MG/L

: BOD5 300	: CADMIUM 1.8	: CHROMIUM 24.7	: COPPER 3.0
: LEAD 2.8	: MERCURY .15	: NICKEL 10.0	: ZINC 12.0
: TTO <.01	:	:	:
:	:	:	:

Average Parameter Discharge : MG/L

: BOD5 0.0	: CADMIUM <.0017	: CHROMIUM 0	: COPPER .0067
: LEAD <.03	: MERCURY 0	: NICKEL .0033	: ZINC .03
: TTO	:	:	:
:	:	:	:

Information

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: MODINE MANUFACTURING
Address: 239 FACTORY STREET ST.: INDIANA ZIP: 46350
Company Representative: BILL BURKHART
Products Produced Or Service Preformed: RADIATOR MANUFACTURING

Pretreatment Process: METALS REMOVAL, PH ADJUSTMENT

Time of Operation: 8HRS.VARIABLE Shifts: 1 # Employees: 166

Classification: METAL FINISHER

Permit #: 1
Account#1: MO1 04330-00
Account#2:
Account#3:

Typical Daily Flow (gpd): 3,977
Monthly Average Flow (gallons): 119,300

Discharge Parameters

: CADMIUM	: CHROMIUM	: COPPER	: LEAD
: NICKEL	: SILVER	: ZINC	: CYANIDE
: TSS	: OIL&GREASE(HC)	: PH	: TTO
:	:	:	:

Daily Parameter Limits : MG/L

: CADMIUM .69	: CHROMIUM 2.77	: COPPER 3.0	: LEAD .69
: NICKEL 3.98	: SILVER .3	: ZINC 2.61	: CYANIDE 1.1
: TSS 300.0	: OIL&GREASE(HC)50	: PH 6-9 S.U.	: TTO 2.13
:	:	:	:

Average Parameter Discharge : MG/L

: CADMIUM <0.0057	: CHROMIUM 0.0248	: COPPER .6252	: LEAD 0.0242
: NICKEL 0.0375	: SILVER 0.0026	: ZINC 0.4481	: CYANIDE 0.0106
: TSS 12.1	: OIL&GREASE(HC).7	: PH 8.448	: TTO
:	:	:	:

Information

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: NEW YORK BLOWER
Address: 17 FACTORY STREET ST.: INDIANA ZIP: 46350
Company Representative: GREG CRAIL
Products Produced Or Service Preformed: BLOWER MANUFACTURING

Pretreatment Process: SOLIDS REMOVAL; OIL REMOVAL; PH ADJUSTMENT

Time of Operation: 7AM-11PM Shifts: 2 # Employees: 280

Classification: METAL FINISHER (PHOSPHATING) Permit #: 15
Account#1: M01 04370-00
Typical Daily Flow (gpd): 50 Account#2: M01 04380-00
Monthly Average Flow (gallons): 1,500 Account#3: M01 04390-00

Discharge Parameters

: CADMIUM	: CHROMIUM	: COPPER	: LEAD
: NICKEL	: SILVER	: ZINC	: PHOSPHORUS
: CYANIDE (T)	: TSS	: PH	: TTO
: OIL&GREASE(T)	: OIL&GREASE(HC)	:	:

Daily Parameter Limits : MG/L

: CADMIUM .69	: CHROMIUM 2.77	: COPPER 3.0	: LEAD .69
: NICKEL 3.98	: SILVER .3	: ZINC 2.61	: PHOSPHORUS
: CYANIDE(T) 1.1	: TSS 300	: PH 6-9 S.U.	: TTO 2.13
: OIL&GREASE(T)150	: OIL&GREASE(HC)50	:	:

Average Parameter Discharge : MG/L

: CADMIUM .0152	: CHROMIUM .0787	: COPPER .6807	: LEAD .0159
: NICKEL .2657	: SILVER .0198	: ZINC .4927	: PHOSPHORUS
: CYANIDE(T).0035	: TSS 41.7	: PH 6.133	: TTO
: OIL&GREASE(T)9.9	: OIL&GREASE(HC)1.8	:	:

Information CYANIDE (T) - TOTAL CYANIDE
OIL & GREASE (T) TOTAL OIL & GREASE
OIL & GREASE (HC) HYDROCARBON FRACTION

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: POWCOTE INC.
Address: 408 TRUESDELL AVENUE ST.: INDIANA ZIP: 46350
Company Representative: DOUG FREDENBURG
Products Produced Or Service Preformed: POWDER PAINTED METAL PARTS

Pretreatment Process: PH ADJUSTMENT

Time of Operation: 7AM-4AM VARIABLE Shifts: 1 # Employees: 8

Classification: POWDER PAINTER

Permit #: 13
Account#1: MO1 04895-00
Account#2:
Account#3:

Typical Daily Flow (gpd): 5,039
Monthly Average Flow (gallons): 151,166

Discharge Parameters

BOD5	TSS	PH	

Daily Parameter Limits : MG/L

BOD5 300	TSS 300	PH 6-9 S.U.	

Average Parameter Discharge : MG/L

BOD5 71.4	TSS 43.4	PH 7.208	

Information

CITY OF LA PORTE INDUSTRIAL PRETREATMENT

Company Name: TOWNDAN ENTERPRISES INC.
Address: 2700 MONROE AVENUE ST.: INDIANA ZIP: 46350
Company Representative: CHIP JONES
Products Produced Or Service Preformed: WEEKLY NEWS PAPER; MISC. PRINTING

Pretreatment Process: SILVER RECOVERY

Time of Operation: 7AM - 5PM Shifts: 1 # Employees: 15

Classification: NEWS PRINT / PRINTER Permit #: 12
Account#1: MO1 04059-00

Typical Daily Flow (gpd): 433 Account#2:
Monthly Average Flow (gallons): 13,000 Account#3:

Discharge Parameters

SILVER	CYANIDE	PH	

Daily Parameter Limits : MG/L

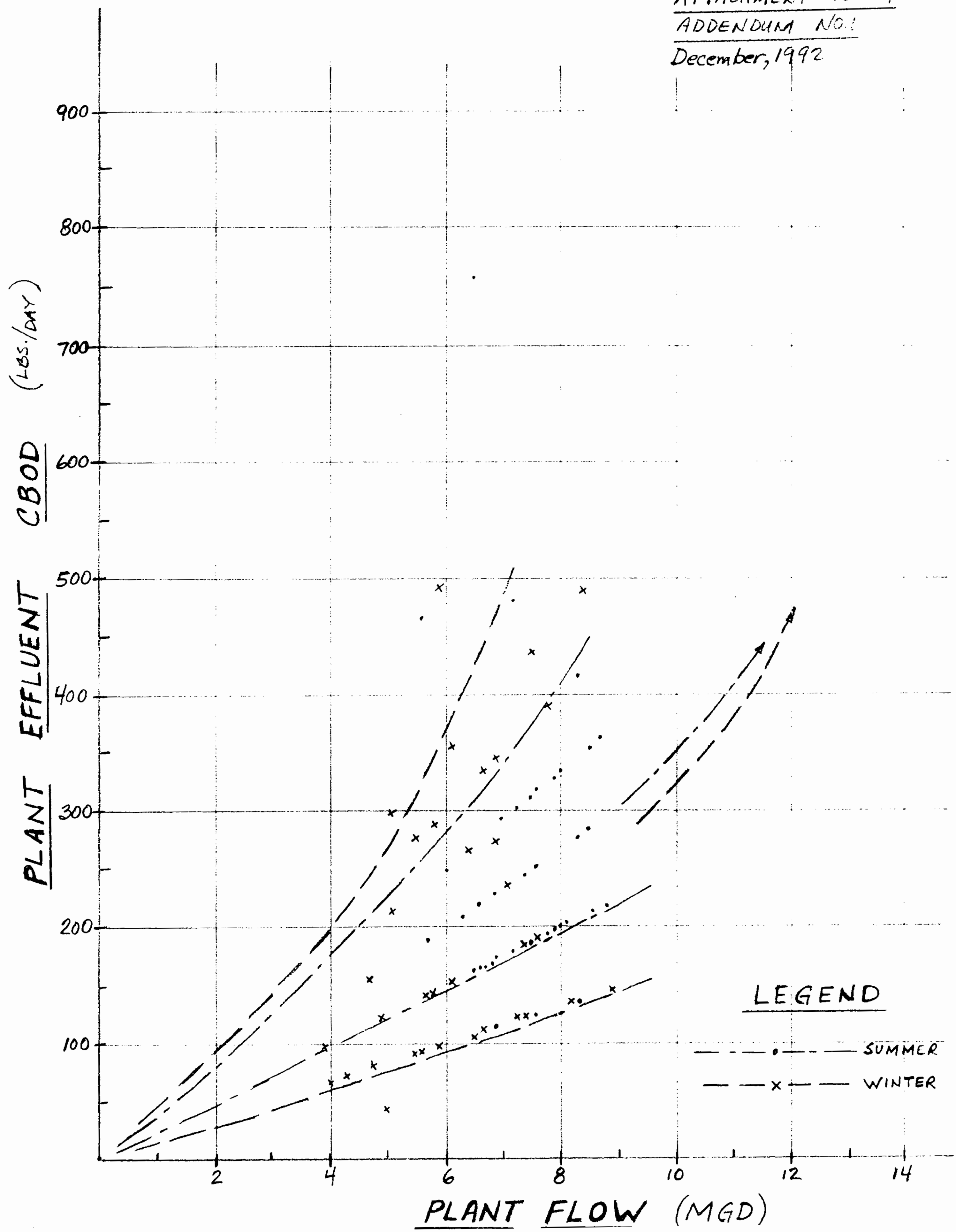
SILVER .3	CYANIDE 1.1	PH 6-9 S.U.	

Average Parameter Discharge : MG/L

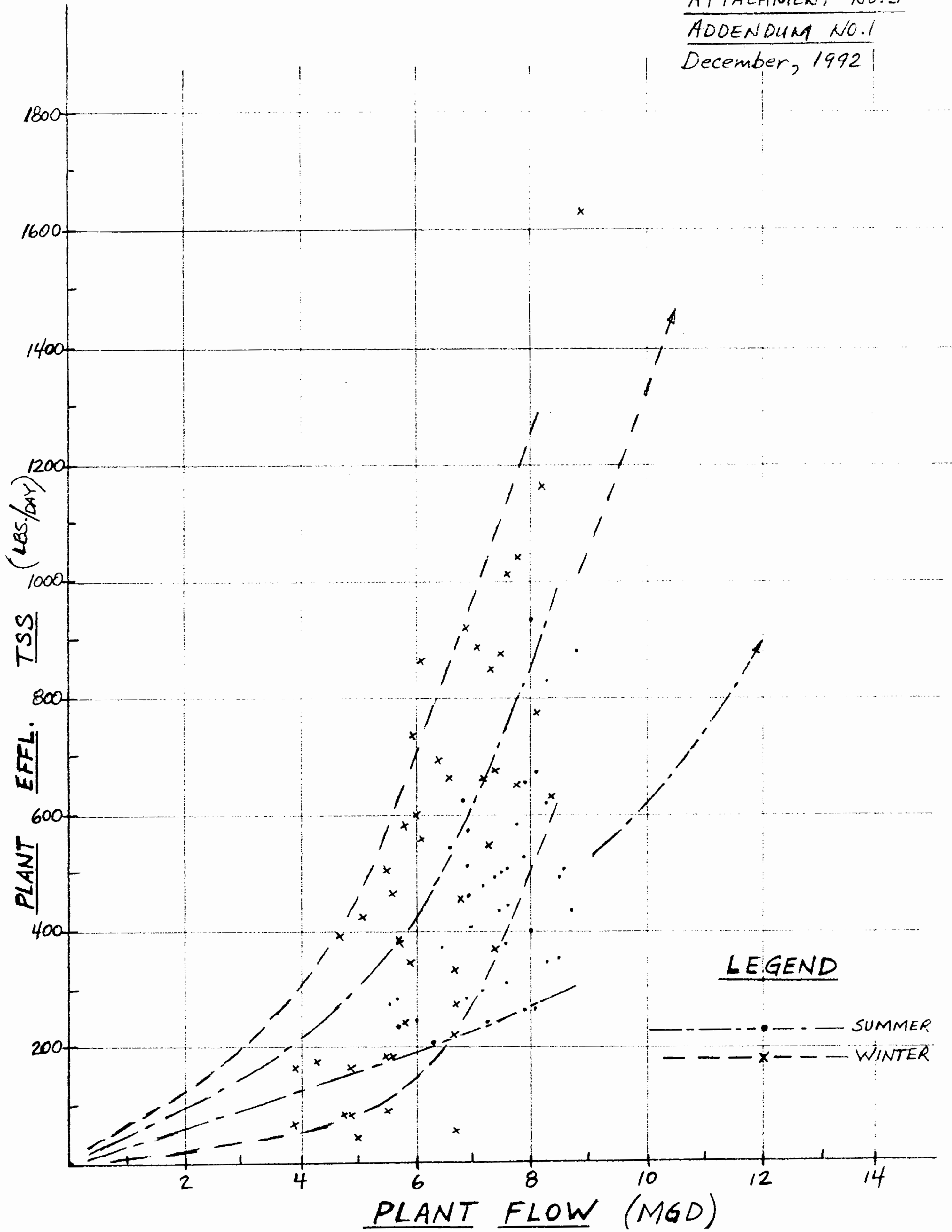
SILVER .0559	CYANIDE <.0003	PH 8.228	

Information CYANIDE (T) - TOTAL CYANIDE

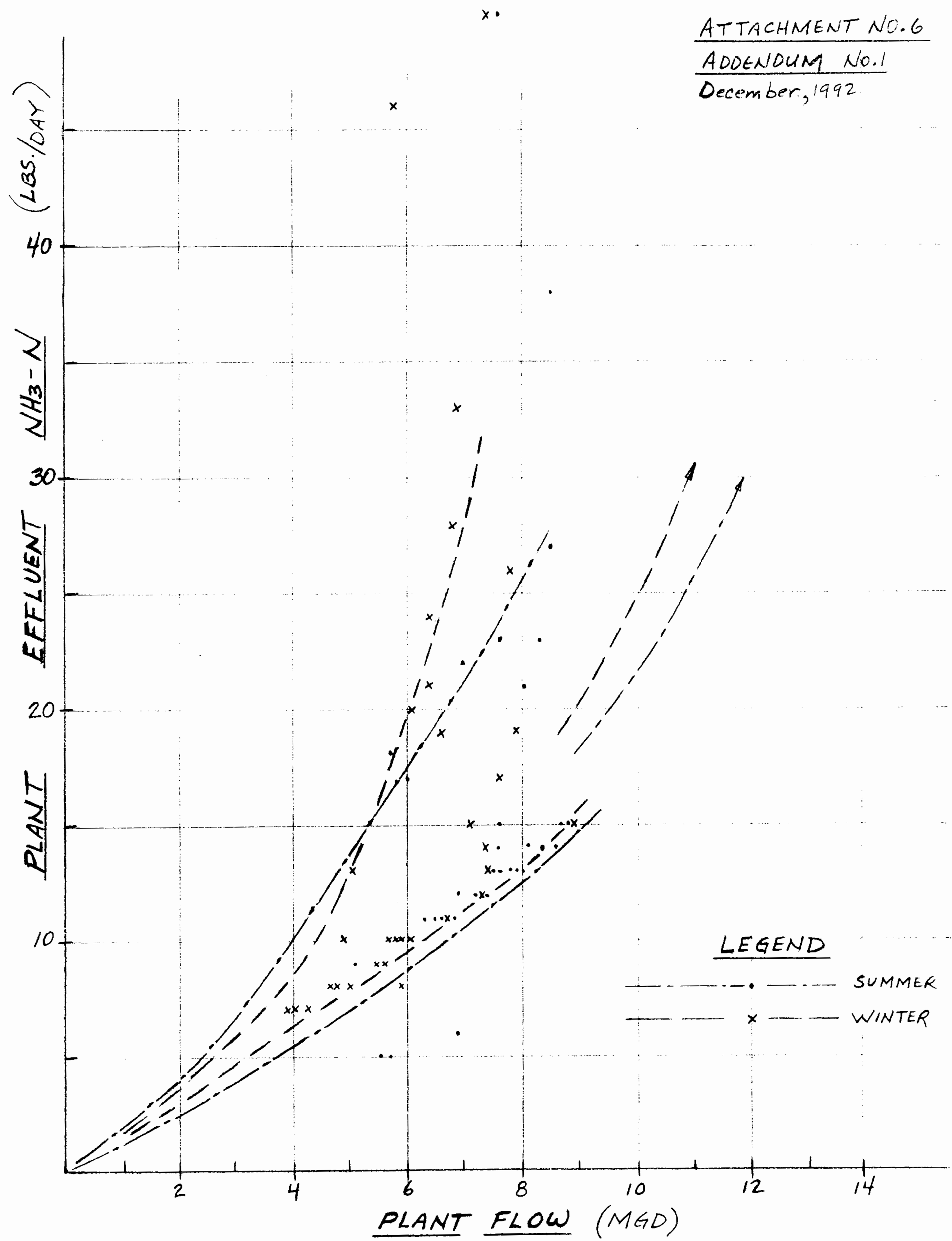
ATTACHMENT NO. 4
ADDENDUM NO. 1
December, 1992



ATTACHMENT NO. 5
ADDENDUM NO. 1
December, 1992



ATTACHMENT NO. 6
ADDENDUM NO. 1
December, 1992



COMBINED SEWER SYSTEM INSPECTION AND MAINTENANCE DETAILS AND SCHEDULE

LaPORTE, INDIANA

COMBINED SEWER SYSTEM OPERATIONAL PLAN

I. COMBINED SEWER SYSTEM INVENTORY

I.A. Length of combined sewers which can effectively be cleaned by hydraulic jetting, 8"-24" diameter pipe size = 231,000 ft.

I.B. Length of combined sewers which can only be effectively cleaned by bucket machine, 30" - 78" diameter pipe size = 84,300 ft.

I.C. Length of combined sewers which might be effectively cleaned by flushing, 8" - 15" diameter pipe size = 193,000 ft.

I.D. Number of combined sewer manholes = 870

I.E. Length of sanitary sewers included in the combined sewer system = 116,000 ft., with 380 manholes. Note: Sanitary sewers are not included in this combined sewer system inspection and maintenance schedule as they do not receive high flows during wet weather and therefore, do not "flush" solids into the wastewater treatment plant and system CSO.

II. POTENTIAL PROBLEMS RESULTING FROM A COMBINED SEWER SYSTEM

II.A. Surface "cave-ins" due to: (1) undermining from water and soil entering combined sewers and manholes thru joint openings, cracks and breaks, (2) structural failure of the sewers or manholes.

II.B. Surface and basement floodings due to the combined sewers inability to carry the flow because of: (1) undersizing, (2) structural failure or (3) partial or complete blockages.

II.C. Excessive solids and pollutant loadings at the wastewater treatment plant or in the system CSO due to the flush-out of accumulated solids from combined sewers and manholes during high wet weather flows.

III. INSPECTION PROCEDURES TO FIND COMBINED SEWER SYSTEM PROBLEMS

III.A. Observe surface settlement areas.

III.B. Visually inspect manholes and all adjacent piping for structural condition, solids accumulation and infiltration leakage.

III.C. Measure and compare high water elevations in the combined sewer system manholes after wet weather flow periods to determine if the flow thru any sewer segments is restricted.

III.D. Internally inspect suspect sewers by sewer televising procedures or by direct entry, if the sewer is large enough and mechanically ventilated to safe air quality levels. Note: Sewer problems are suspect if: (1) surface settlement is occurring above, (2) solids accumulation is continually occurring within the sewer or in the adjacent manholes or (3) surface or basement flooding is occurring on or upstream of the sewer.

III.E. Inspect the combined sewer overflow (CSO) weir in the wastewater treatment plant influent flow junction structure for structural integrity and solids accumulation. Also, inspect the flow channel from the weir into the CSO retention pond for structural integrity and debris accumulation.

IV. MAINTENANCE PROCEDURES FOR COMBINED SEWER SYSTEM

IV.A. Sewer cleaning, by hydraulic jetting or bucket machine.

IV.B. Sewer flushing, with water from a tank truck.

IV.C. Removal of accumulated solids from manholes by vacuum truck, as required, and as part of sewer cleaning procedures.

IV.D. Catch basin maintenance to minimize the solids entry into the combined sewers with surface water. Refer to Attachment No. 9 for catch basin maintenance details.

IV.E. Removal of any solids accumulation on the system CSO weir and any accumulated debris in the flow channel from the weir to the CSO retention pond.

V. ENFORCEMENT OF SEWER USE ORDINANCE AND INDUSTRIAL PRETREATMENT REQUIREMENTS

V.A. To prevent the discharge of substances into the combined sewer system which could: (1) chemically attack the system materials, (2) accumulate as solids within the system, (3) physically or biologically damage the wastewater treatment plant or (4) degrade the quality of the system CSO during wet weather.

V.B. To require all new surface water connections to the combined sewer system to have a regulated reduced rate of discharge.

V.C. To prevent the construction of any new combined sewers.

VI. SCHEDULE OF COMBINED SEWER SYSTEM INSPECTION METHODS

VI.A. Manhole Inspections - Every manhole and adjacent piping should be inspected every five years and an inspection report prepared for each inspection. These inspections can be made throughout the years at an average rate of approximately 3 per week, or preferably during a two month time period, at a rate of approximately 20 per day.

VI.B. Surface Settlement Observations - All combined sewer system maintenance personnel should be continuously aware of this situation and should look for surface settlement areas during the manhole inspections and at all other times that their jobs permit.

VI.C. Measure Manhole High Water Elevations - Should be included in the Section VI.A. Manhole Inspections work, if the high water elevation marks are still noticeable. Otherwise, this should be done as part of a surface or basement flooding problem investigation.

VI.D. Wet Weather Flow Simulation - Wet weather flows in segments of combined sewers can be simulated by temporarily blocking the sewer flow upstream of the segment, letting the blocked flow accumulate to a sufficient volume and then releasing the flow. The water levels in the manholes immediately upstream and downstream of the sewer segment should be closely monitored after the release of flow to determine if the flow thru the sewer segment is restricted.

VI.E. Internal Inspect of Sewers - Should be done if a problem is suspected and has been verified by one of the preceding inspection techniques.

VI.F. CSO Inspection - Should be inspected after every CSO event, by wastewater treatment plant personnel.

VI.G. Summary Chart for Combined Sewer System Inspection Schedule

INSPECTION ITEM DESCRIPTION	INSPECTION SCHEDULE
A. Manhole Inspections	Once Every Five Years
B. Surface Settlement Observations	On-Going
C. Manhole High Water Elevation Measurements	(1) Part of Manhole Inspections and (2) Part of Sewer Problem Investigations
D. Wet Weather Flow Simulation	Part of Manhole High Water Elevation Measurements
E. Internal Inspection of Sewer	As Justified by any of the Preceding Inspection Items
F. System CSO	After Every CSO Event

VII. SCHEDULE OF COMBINED SEWER SYSTEM MAINTENANCE METHODS

VII.A. Sewer Cleaning - Determine sewer segments requiring periodic cleaning by: (1) reviewing all past sewer cleaning records and information and (2) cleaning all combined sewers over a five year period, at an average rate of 1200 ft. per week and recording the results. Clean all of the necessary sewer segments on an annual basis or more frequently, if required.

VII.B. Sewer Flushing - Is an alternative to sewer cleaning for small size (15" diameter and smaller) combined sewers, particularly the dead end and low flow segments of the combined sewer system. Any sewer flushing should be performed within the sewer cleaning schedule.

VII.C. Manhole Cleaning - Is part of sewer cleaning as the sewer solids are captured and removed from the manhole immediately downstream of the sewer segment being cleaned. Certain manholes may require separate cleaning due to solids accumulation. These manholes will be discovered during the Manhole Inspections and should be cleaned every year or more frequently, if required.

VII.D. Catch Basin Maintenance - Refer to Attachment No. 9 for this schedule.

VII.E. CSO Maintenance - After every CSO event, remove accumulated solids from the system CSO weir and any accumulated debris from the flow channel between the weir and the CSO retention pond.

VII.F. Summary Chart for Combined Sewer System Maintenance Schedule

MAINTENANCE ITEM DESCRIPTION	MAINTENANCE SCHEDULE
A. Sewer Cleaning	(1) Determine necessary sewer segments over a five year period of cleaning all sewers (2) Clean all necessary sewer segments at least once per year
B. Sewer Flushing	Part of Sewer Cleaning
C. Manhole Cleaning	(1) Determine necessary manholes over five year manhole inspection schedule (2) Clean all necessary manholes at least once per year
D. System CSO	After every CSO event

STREET AND CATCH BASIN CLEANING DETAILS AND SCHEDULE

LaPORTE, INDIANA

COMBINED SEWER SYSTEM OPERATIONAL PLAN

I. STREET AND CATCH BASIN INVENTORY

I.A. Length of street curb and/or gutter which drains into the combined sewer system = ___*___

I.B. Number of catch basins connected to the combined sewer system = ___*___

II. IMPORTANT EFFECTS OF STREET AND CATCH BASIN CLEANING ON COMBINED SEWER SYSTEM

II.A. Street Cleaning - minimizes the entry of sand and dirt into the catch basins and thus reduces; (1) the need for catch basin cleaning, (2) the amount of sand and particularly dirt which enters the combined sewer system, (3) the need for combined sewer cleaning, (4) the amounts of wastewater treatment plant solids load and sludge disposal and (5) the system CSO solids load.

II.B. Catch Basin Cleaning - minimizes the entry of sand into the combined sewers and thus reduces; (1) the need for combined sewer cleaning, (2) the amounts of wastewater treatment plant solids load and sludge disposal and (3) the system CSO solids load.

III. STREET CLEANING RESPONSIBILITIES

III.A. LaPorte city street cleaning is the responsibility of the City Street Department.

III.B. State and Federally designated highways thru LaPorte are cleaned by both the Indiana Department of Transportation and the City Street Department.

III.C. The LaPorte City Wastewater Department, thru an inter-departmental agreement, shall direct the City Street Department's street cleaning work in the combined sewer areas of LaPorte.

IV. STREET CLEANING SCHEDULE

Note: This schedule pertains to all streets with curb and/or gutter which are drained by combined sewers.

IV.A. All streets should be cleaned when needed and as weather permits. The determination of need shall be made by the City Wastewater Department. Weather limitations shall be freezing temperatures or wet conditions. For planning purposes, the following schedule is assumed:

IV.A.1. Summer Season (May thru October) - clean streets on an as needed basis.

IV.A.2. Winter Season (November thru April) - clean highway streets and city streets as least twice during the winter season.

*To be determined during 15 month PLAN Implementation and Status Report Period

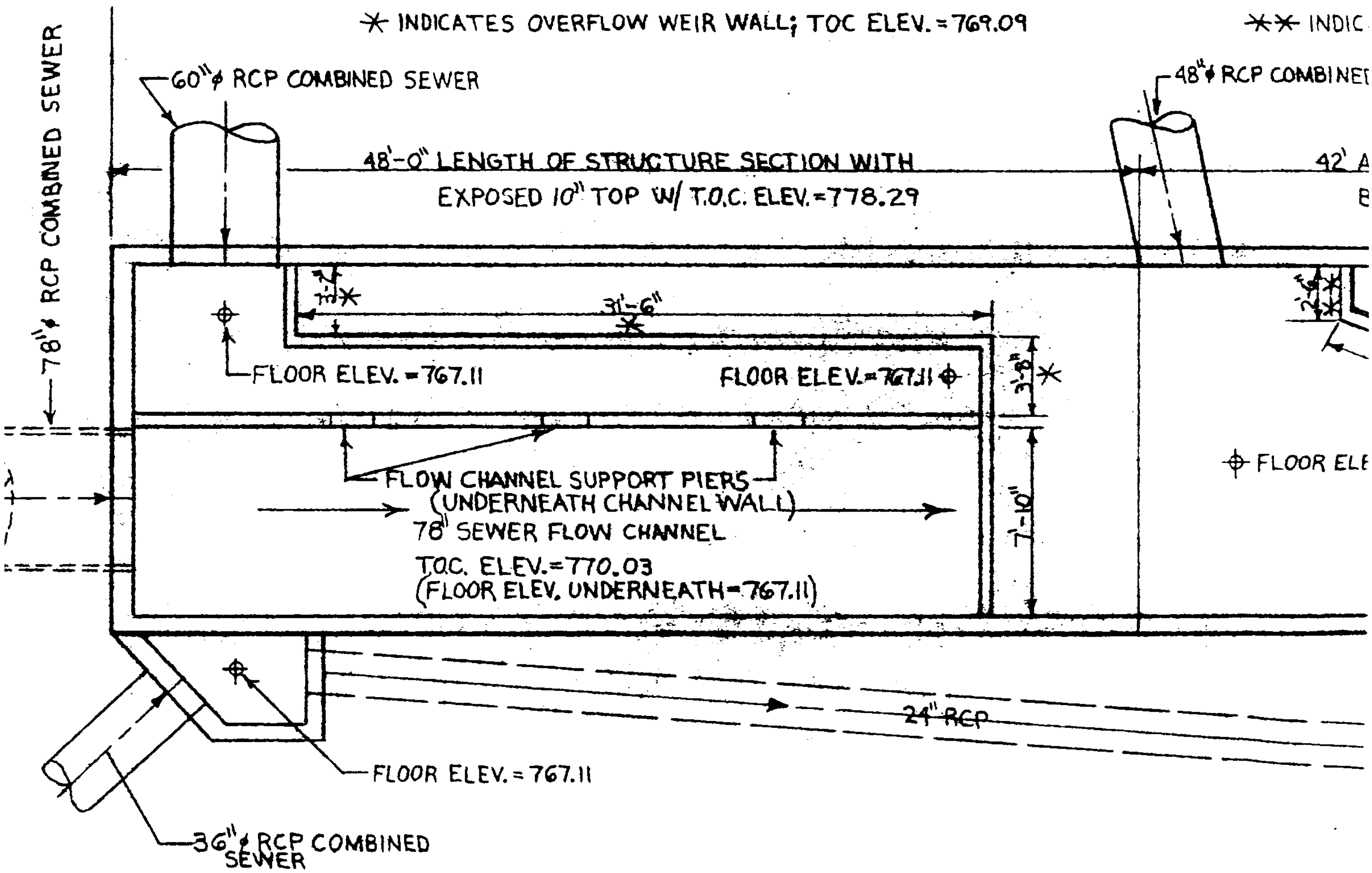
ATTACHMENT NO. 9
ADDENDUM NO. 1
December, 1992

V. CATCH BASIN CLEANING AND INSPECTION SCHEDULE

V.A. Highway Street Catch Basins - clean and inspect at the end of each winter season (around May 1).

V.B. City Street Catch Basins - clean and inspect every five years, during the summer season.

INFLUENT STRUCTURE AND CS
AND FLOW CHANNEL DETAILS
WASTEWATER TREATMENT PL
LaPORTE, INDIANA



PLAN VIEW
NO SCALE

INFLUENT STRUCTURE AND CSO WEIR
AND FLOW CHANNEL DETAILS
WASTEWATER TREATMENT PLANT
LaPORTE, INDIANA

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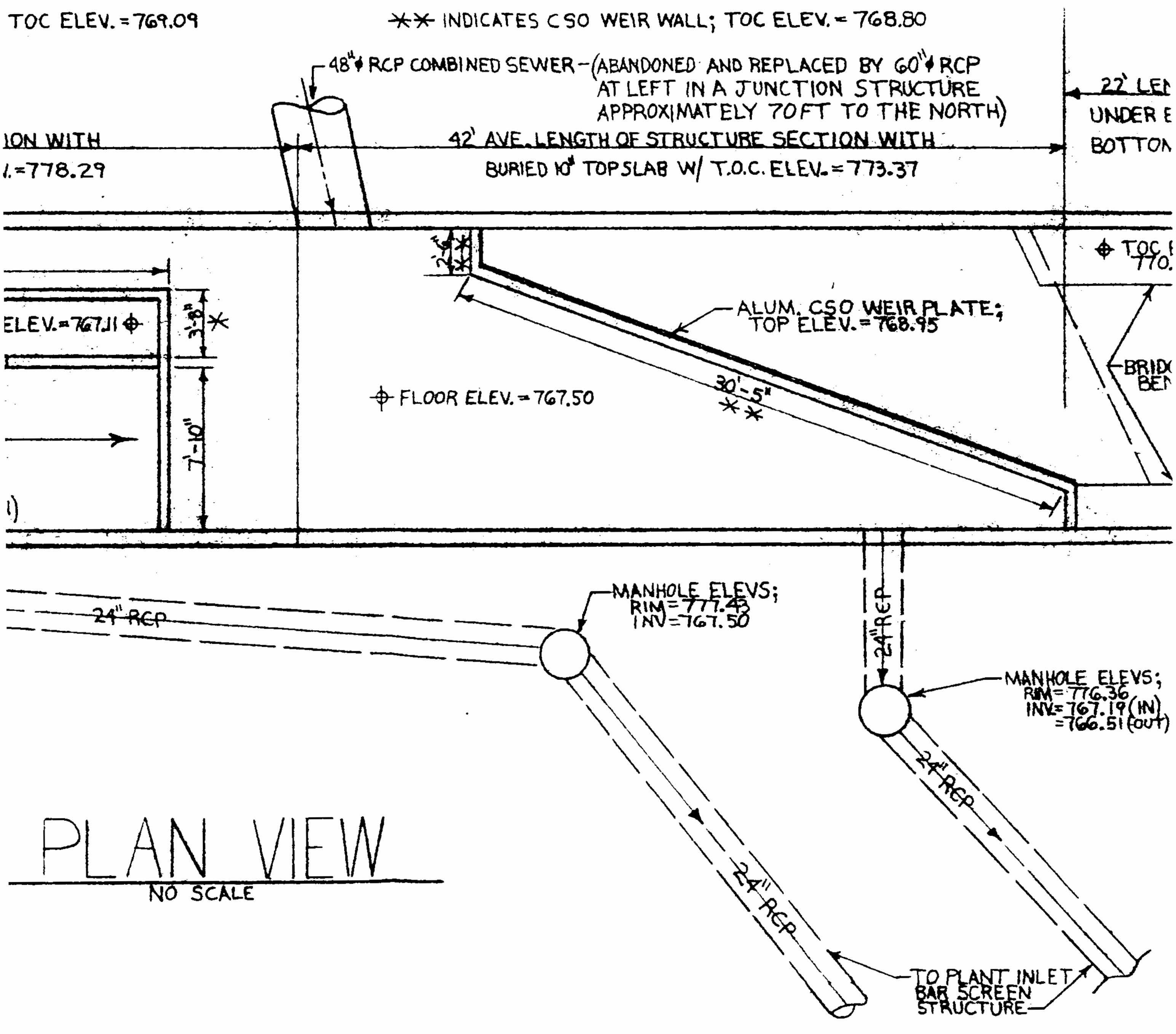
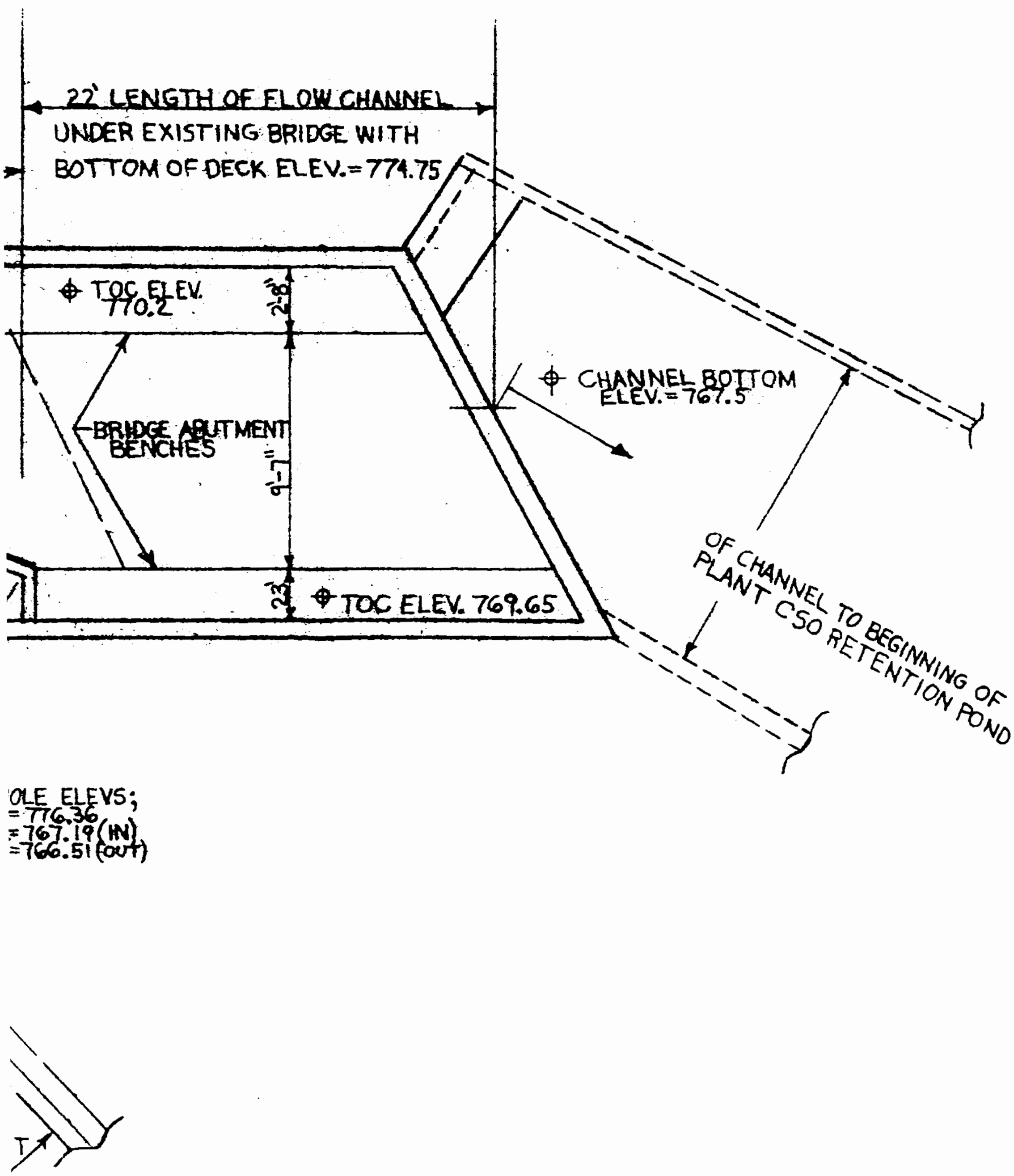


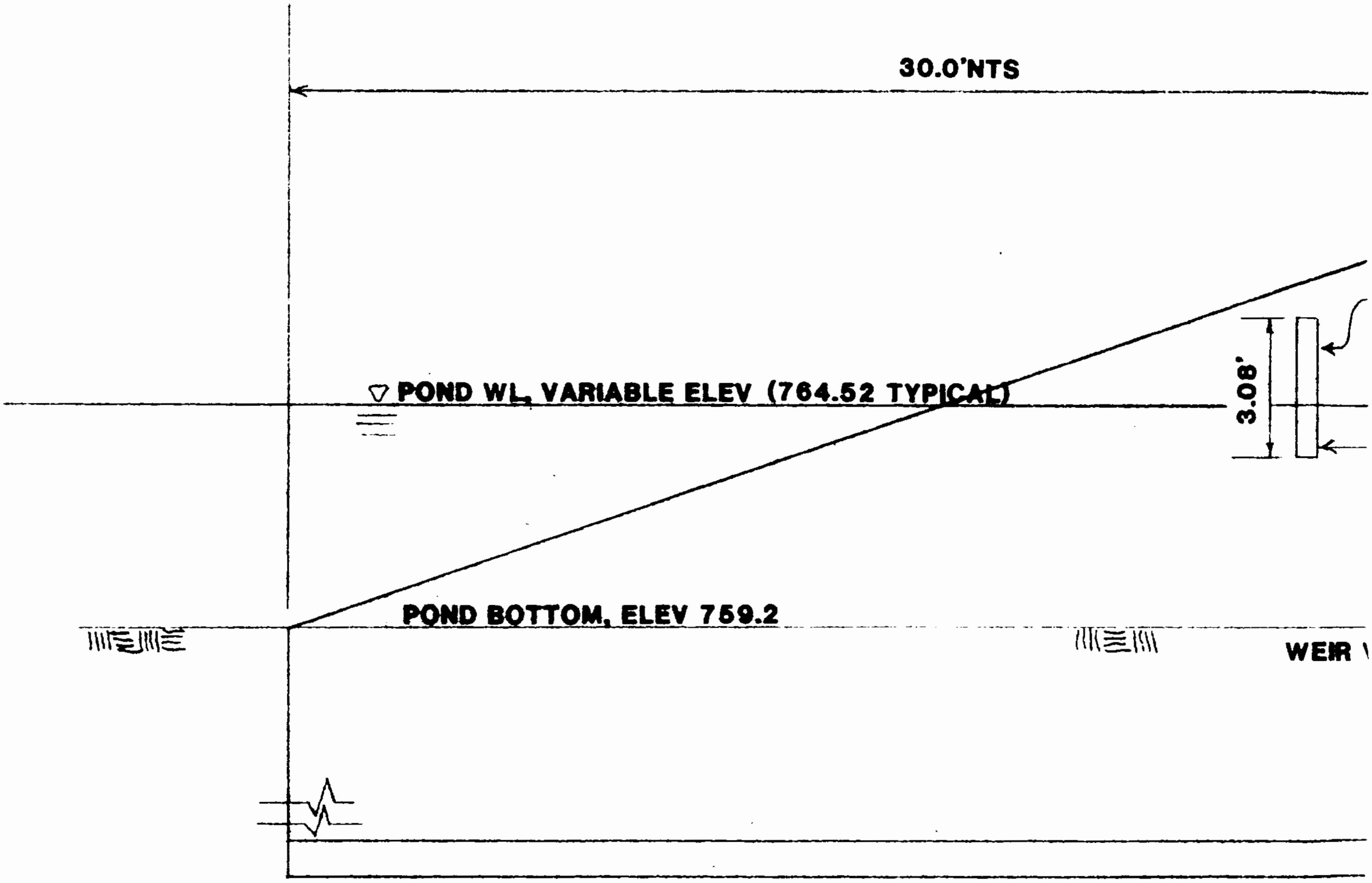
ATTACHMENT NO. 2

ADDENDUM NO.1

December, 1992

1-N-1





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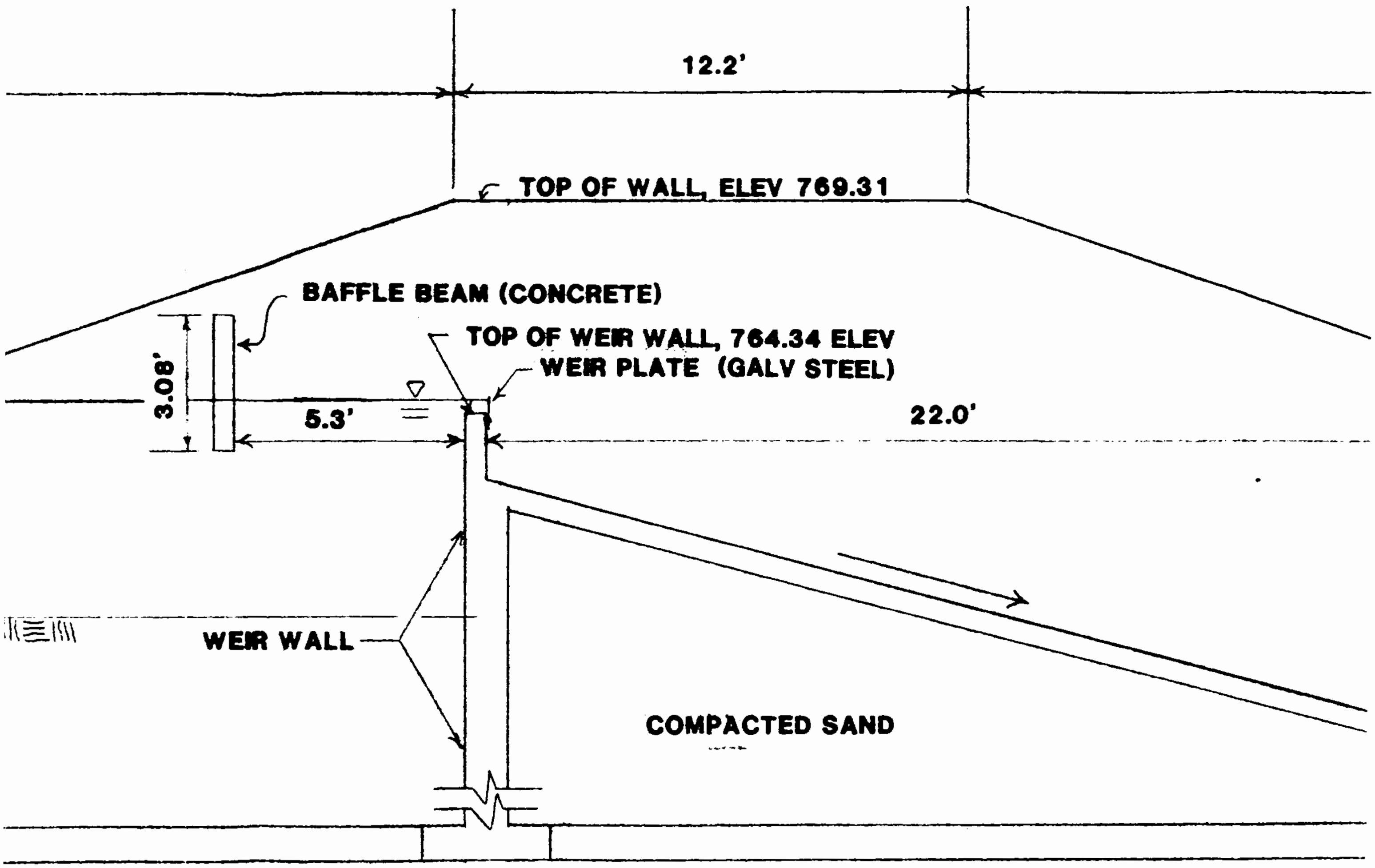
3.08'
POND BOTTOM, ELEV 759.2
WEIR



LONGITUDINAL SECTION

CSO RETENTI(
WASTEWAT
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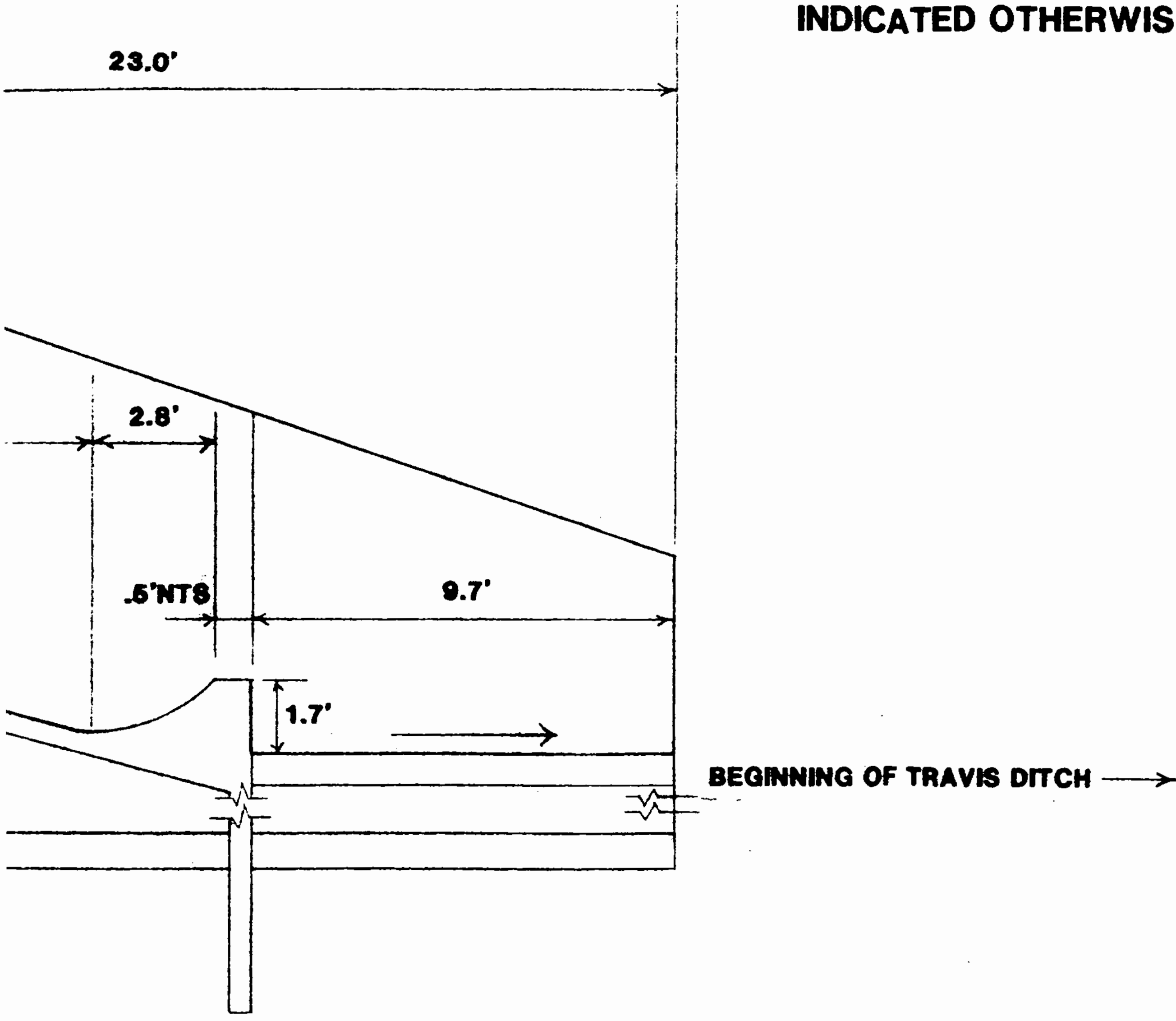
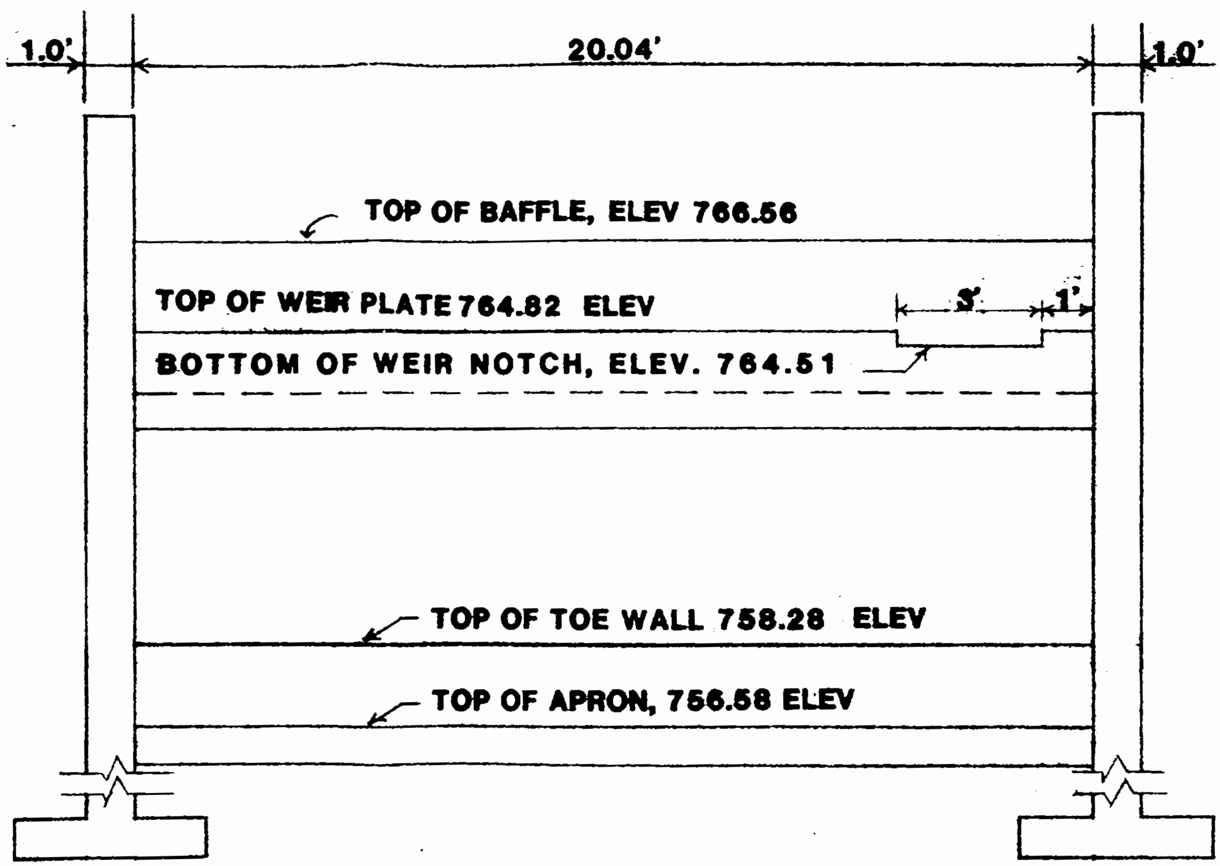
NOTE: SPILLWAY STRUCTURE IS REINFOI
CONCRETE EXCEPT WHERE
INDICATED OTHERWISE



ION POND SPILLWAY DETAILS
TER TREATMENT PLANT
aPORTE, INDIANA

ATTACHMENT NO. 3
ADDENDUM NO. 1
December, 1992

FORCED



CROSS-SECTION

City of LaPorte
INDIANA
Wastewater Department

2101 Boyd Blvd.
LaPorte, IN 46350
(219)362-2354
(219)362-1018 FAX
4/6/98

Update to LaPorte's CSO Operational Plan To Meet Indiana Department of Environmental Management's Minimum Controls 7, 8, and 9

Greeley and Hansen
3750 Guion Rd., Suite200
Indianapolis, Indiana 46222

VII Minimum Control No.7 - Pollution Prevention Programs

VII.1 GENERAL

Pollution prevention programs reduce the amount of contaminant and floatables that enter the combined sewer system and the receiving stream. This section presents implemented and proposed pollution prevention programs.

VII.2 EXISTING POLLUTION PREVENTION PROGRAMS

Street Sweeping

The City currently has a street sweeping program. Streets in combined sewer areas are cleaned twice during the spring. Streets with more solids accumulation, such as the downtown area, are cleaned more often.

Solid Waste Collection and Recycling

In addition to the once a week curbside solid waste collection program, the City has strategically placed trash collection receptacles approximately every block in the downtown area to control litter. Receptacles are emptied once a week.

The City has a City-wide curbside recycling program that collects recyclable materials every other week. Approximately 63 tons of materials are collected every two weeks through the recycling program.

Hazardous Waste Collection

The Lake Michigan Districts (LMD) has a program that collects household hazardous waste 2 or 3 times per the year from communities around Lake Michigan, including the City of LaPorte. The date and location of the hazardous waste collection is advertised in the LaPorte Herald Argus. A sample of the advertisement is shown on Figure VII-1.

Yard Waste Collection

The City has an extensive yard waste collection program. Yard wastes including grass cuttings, leaves and Christmas trees are collected weekly or can be picked up by calling the City Street Department. This prevents yard wastes from entering and blocking catch basins.

Control of Illegal Dumping

The City has placed signs at strategic locations to prevent illegal dumping of solid wastes. A $500 penalty is enforced for anyone caught violating the ordinance.

Catch Basin Sand Trap and Trash Baffle

In 1992, the City passed an ordinance requiring that new catch basins be installed with a sand trap and trash baffle. This prevents solids and floatables from entering storm and combined sewer systems.

Wetlands Ordinance

Wetlands Ordinance 5-91 was adopted by the City in 1991 with the goal of preserving existing wetlands within the city limit. Under the ordinance, the City's Board of Public Works and Safety reviews projects that fill or alter existing wetlands. By preserving existing wetlands, the City ensures that no additional impervious acres and trash from the area developed are added to the watershed.

Overflow Lagoon Baffle

The overflow lagoon has a concrete baffle at its outfall. The baffle prevents most floatables from being discharged into Travis Ditch.

VII.3 PROPOSED POLLUTION PREVENTION PROGRAMS

Additional Hazardous Waste Drop-Off Site

The City will investigate providing household battery drop-off sites at local government establishments such as the public library. The City will also pursue arrangements with local businesses including oil changing stations to be the designated drop-off sites for used motor oils and anti-freeze.

Public Education Newsletter

The City will develop a semi-annual public education newsletter to raise public awareness of the impacts of CSOs on the receiving stream water quality, what the City is doing to control CSOs, the cost of CSO control, and how individuals and organizations can prevent or reduce pollution. The newsletter will also include information on hazardous waste drop-off sites.

Catch Basin Dumping Warning Signs

The City proposes stenciling warning signs on curbs at catch basins where there is evidence of illegal dumping. Figure VII-2 shows the proposed warning sign. The warning sign will be stenciled using bright orange weatherproof paint.

Product Use Restriction

The City proposes to adopt an ordinance that requires its citizens to use biodegradable products and environmentally safe chemicals. Among the products targeted are as follows:

- Styrofoam packing materials, cups and other products. These products are non-biodegradable.
- Certain herbicides applied at public parks and golf courses that impact aquatic life and water quality.

CSO Structure Floatable Control

The City has one CSO structure located at the wastewater treatment plant. The City proposes to install a screen or baffles as part of a long-term CSO control plan to prevent floatables from discharging to the overflow lagoon and Travis Ditch.

Lake Michigan Districts' Household Hazardous Waste Program

Collection times are from 10 a.m. to 3 p.m.

We Accept: **Batteries, Cleaners, Oils, Paints, Pesticides, Insecticides, Poisons, Solvents, Anti-Freeze, Stains, Varnishes, Gasolines and Reusable Latex Paint.**

1997 LaPorte County Schedule

May 17	Wanatah	Town Hall, Main St. & R.R. Ave
June 21	LaPorte	Kabelins True Value, 512 Andrew Ave.
July 25	Mich. City	Kabelins True Value, 432 St. John Rc.
Aug. 23	LaPorte	To Be Announced
Sept. 20	LaPorte	Kabelins True Value, 512 Andrew Ave.
Oct. 18	Mich. City	Kabelins True Value

We Cannot Accept: **Tires, Appliances, Medical or Biological Waste, Explosives, Ammunition, Radioactive Waste or Asbestos.**

REDUCE - REUSE - RECYCLE

Questions? Call 1-219-326-1425 or 1-800-946-4449

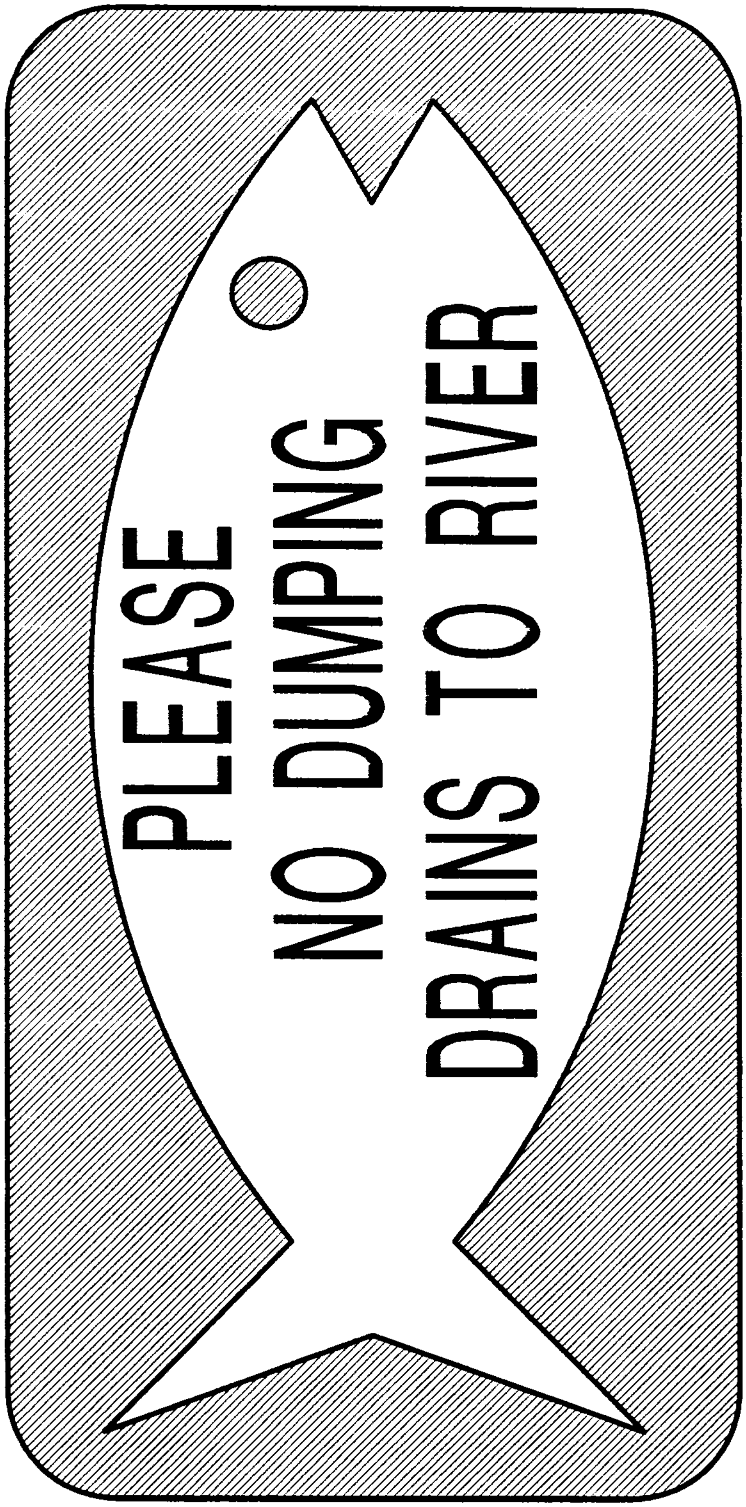
This Program Funded in Part By The Department of Environmental Management.

HAZARDOUS WASTE COLLECTION
SAMPLE ADVERTISEMENT

CITY OF LAPORTE
CSO OPERATIONAL PLAN
UPDATE TO MEET MINIMUM
CONTROL NO. 7, 8 AND 9

GREELEY AND HANSEN

FIGURE VII-2



CATCH BASIN DUMPING WARNING SIGN

CITY OF LAPORTE
CSO OPERATIONAL PLAN
UPDATE TO MEET MINIMUM
CONTROL NO. 7, 8 AND 9

GREELEY AND HANSEN

VIII MINIMUM CONTROL NO.8 - PUBLIC NOTIFICATION

VIII.1 GENERAL

The intent of public notification is to inform the public, in a timely manner, of the location of the CSO outfall, the occurrences of CSO and the possible health and environmental effects of CSO.

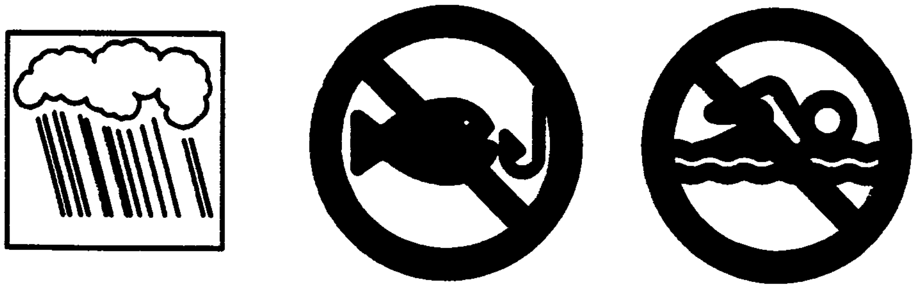
The City is planning to implement the following public notification programs:

VIII.2 PLANNED PROGRAMS

CSO Outfall Warning Sign

The City of LaPorte has one CSO outfall which is located at the wastewater treatment plant's overflow lagoon. The lagoon is located in an area that is not readily accessible by the public. In the future, the open area west of the overflow lagoon will be converted to a wetlands/City park. When the wetlands/City park is created, as a precaution, the City will install the warning sign shown on Figure VIII-1 around the perimeter of the lagoon and the sign shown on Figure VIII-2 at the lagoon's outfall.

FIGURE VIII-1



NOTICE

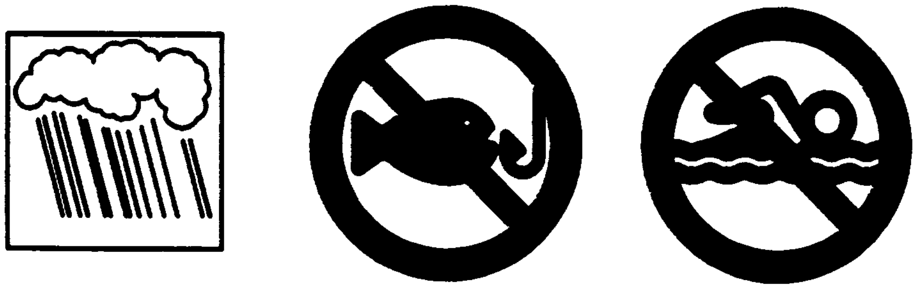
This lagoon receives combined sewer overflows. The water in the lagoon could be polluted. Avoid contact with the water in the lagoon. For more detailed information, please call LaPorte's Wastewater Treatment Plant at 362-2354.

OVERFLOW LAGOON WARNING SIGN

GREELEY AND HANSEN

CITY OF LAPORTE
CSO OPERATIONAL PLAN
UPDATE TO MEET MINIMUM
CONTROL NO. 7, 8 AND 9

FIGURE VIII-2



NOTICE

Travis Ditch receives combined sewer overflows and can become polluted during or after rain events or snow melt. For more detailed information, please call LaPorte's Wastewater Treatment Plant at 362-2354.

OVERFLOW LAGOON OUTFALL AND
TRAVIS DITCH WARNING SIGN

GREELEY AND HANSEN

CITY OF LAPORTE
CSO OPERATIONAL PLAN
UPDATE TO MEET MINIMUM
CONTROL NO. 7, 8 AND 9

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VIII MINIMUM CONTROL NO.9 - CSO MONITORING AND CHARACTERIZATION OF THE COMBINED SEWER SYSTEM

VIII.1 GENERAL

The City of LaPorte has one CSO that discharges to the overflow lagoon. The 23 million gallon overflow lagoon receives combined sewer overflow when the plant's capacity is exceeded. There is a natural spring in the overflow lagoon that contributes approximately 170,000 gallons per day of clear water. The overflow lagoon discharges at a constant rate to Travis ditch because of the natural spring. The overflow from the lagoon and the wastewater treatment plant's effluent form the headwaters of Travis Ditch. Figure IX-1 shows LaPorte's wastewater treatment plant and the overflow lagoon.

The City plans to install a CSO lagoon pump station to pump water from the overflow lagoon to the head end of the wastewater treatment plant. The pump station will lower the water level in the lagoon to provide storage capacity during rainfall events. Figure IX-2 shows schematically the plant process and the proposed pump station.

The overflow lagoon provides primary treatment for the combined sewer overflow.

The City of LaPorte's existing CSO Monitoring and Characterization of the Combined Sewer System includes the following:

- Rainfall Monitoring, and
- Overflow Lagoon Outfall Flow Monitoring

This section of the CSO Operational Plan presents the CSO Monitoring and Combined Sewer Characterization Program.

IX.2 EXISTING PROGRAMS

Rainfall Monitoring

A National Weather Service (NWS) tipping bucket rain gage is located in the City's Water Works Plant and is shown in Figure IX-3. Historical rainfall data, including previous month's daily rainfall totals, are available from NWS office in LaPorte. More recent rainfall data is available upon request from NWS. The rain gage information is combined with the CSO Outfall Flow Monitoring information to produce the monthly Overflow Lagoon Monitoring Report submitted to IDEM.

Overflow Lagoon Outfall Monitoring

The City uses a compound sharp crested rectangular weir to measure the lagoon's overflow. The of overflow from the lagoon to Travis Ditch.

Figure IX-4 shows a sample of the monthly lagoon overflow monitoring report . Rainfall information from the NWS rain gage is added to the report.

From May 1992 to April 1993, under Agreed Order B-1442, the City of LaPorte conducted a study of the lagoon's overflow water quality. The overflow lagoon's weekly discharges were tested for CBOD5, Total Suspended Solids (TSS), Ammonia, pH, Dissolved Oxygen (DO), Fecal Coliform, Cadmium, Hexachrome, Copper, Lead, Nickel, Zinc and Cyanide for a total of 55 samples. A total of 205 storms occurred during the study period.

IX.3 PROPOSED PROGRAM

During wet weather, significant turbulence exists in the junction chamber that diverts combined sewer to the overflow lagoon. The junction chamber will be modified under LaPorte's long-term CSO control plan for installation of a flow monitor to measure combined sewer flow to the overflow lagoon.

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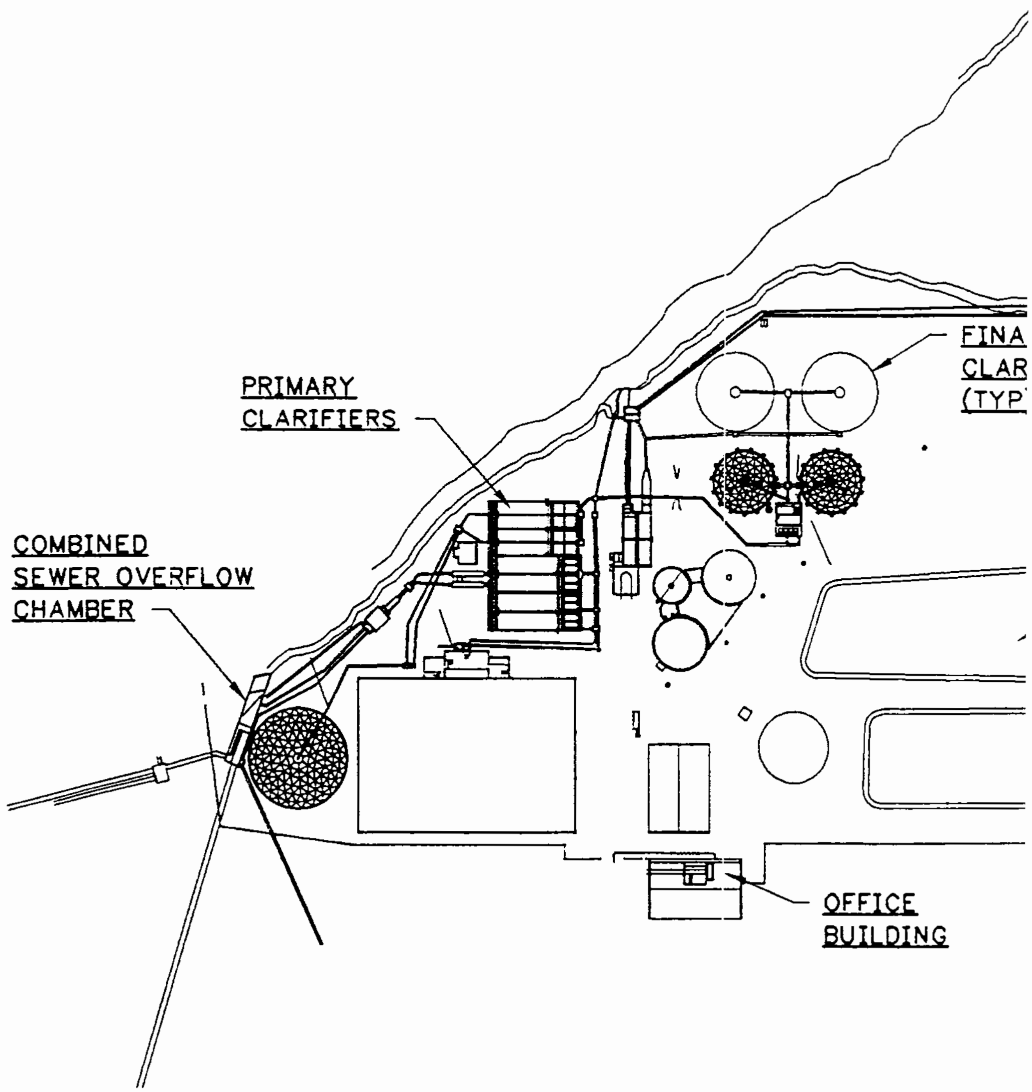

LAPORTE'S WASTEWATER TRE

SCALE: 1" = 200'

GREELEY AND HANSEN

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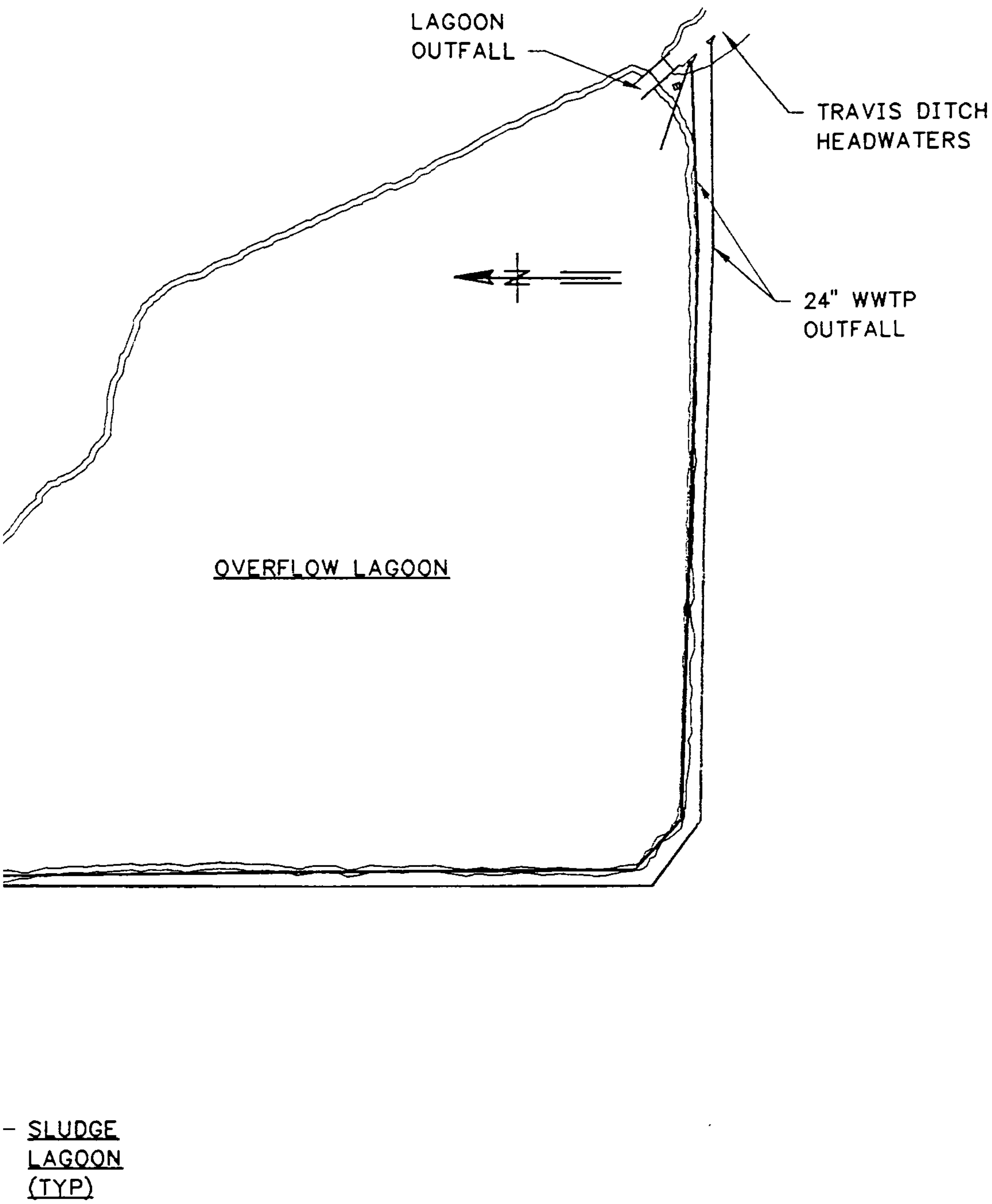
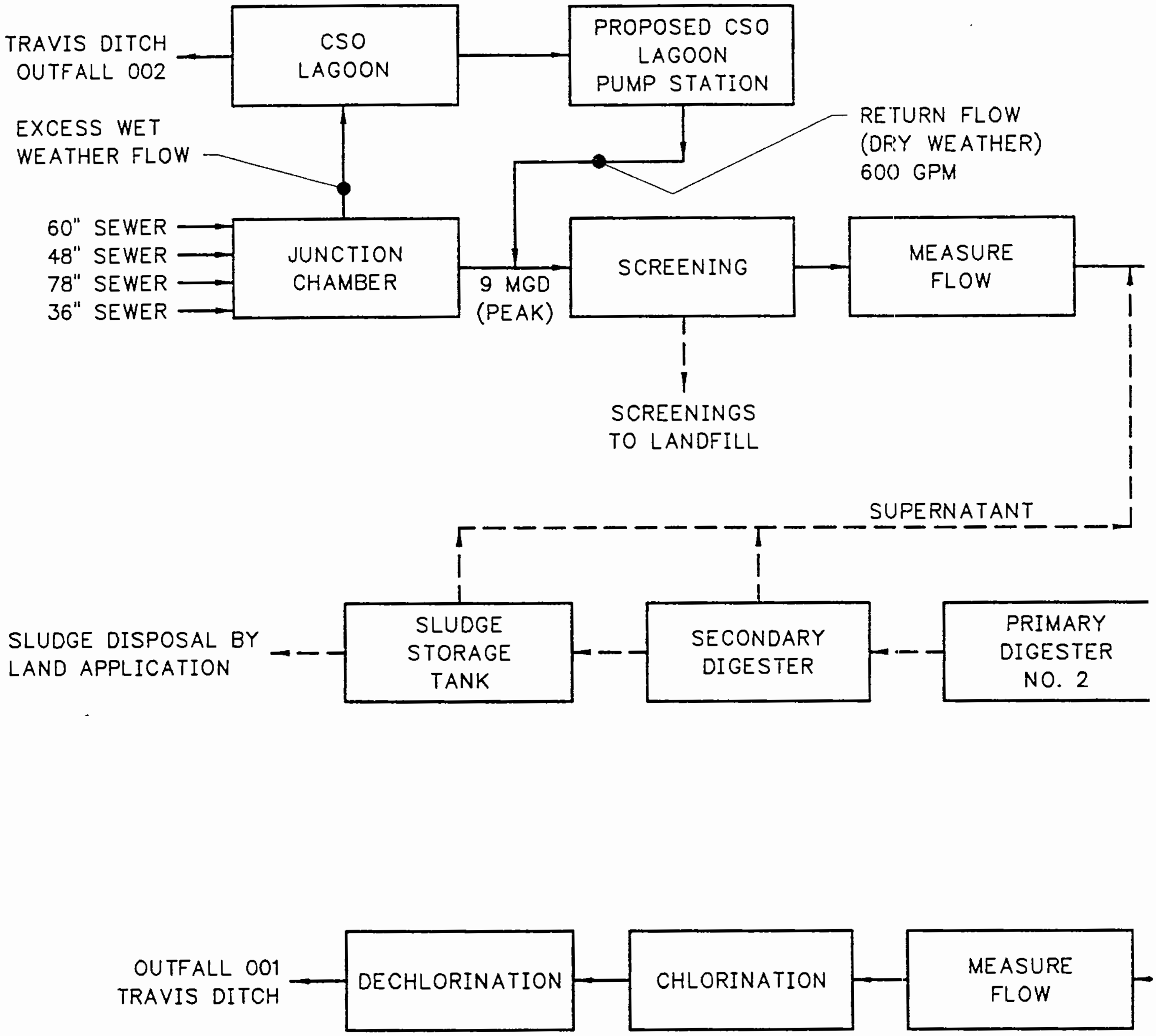
FIGURE IX-1



ENT PLANT AND OVERFLOW LAGOON

CITY OF LAPORTE
CSO OPERATIONAL PLAN
UPDATE TO MEET MINIMUM
CONTROL NO. 7, 8 AND 9



LAPORTE WASTEWATER TF

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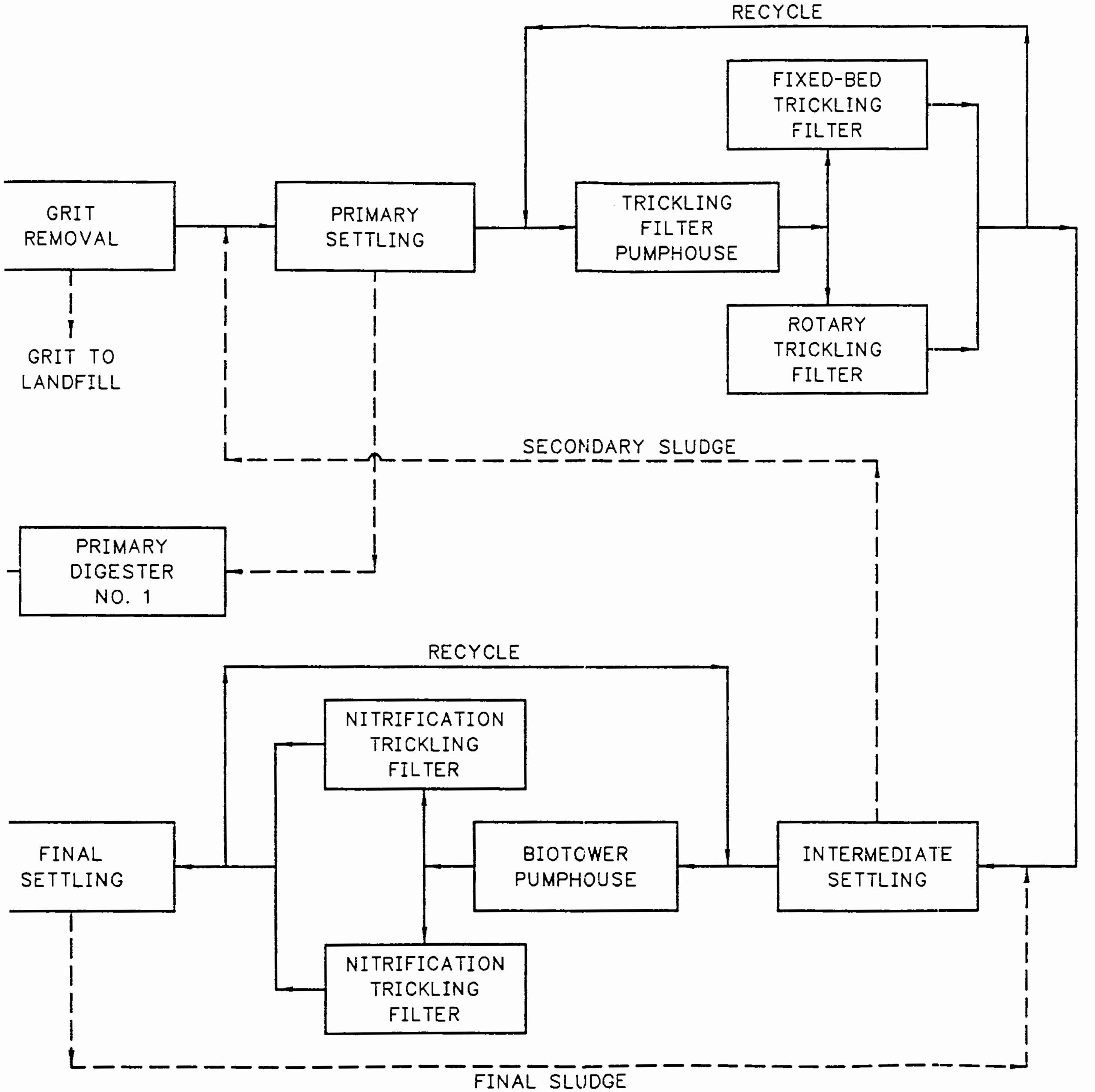
GREELEY AND HANSEN

FIGURE IX-2



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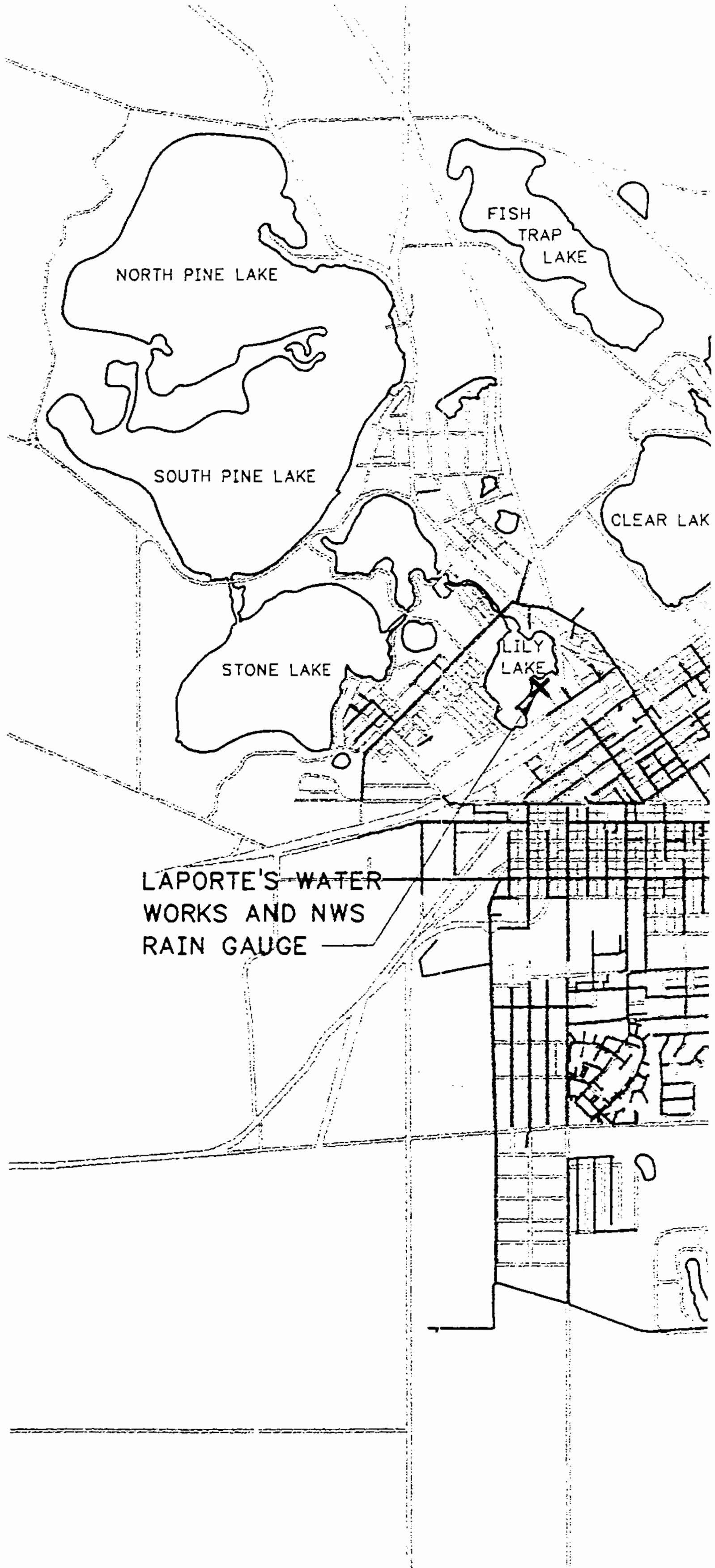
CITY OF LAPORTE
CSO OPERATIONAL PLAN
UPDATE TO MEET MINIMUM
CONTROL NO. 7, 8 AND 9



COLLECTION SYSTE

SCALE: 1" = 3000'

GREELEY AND HANSEN

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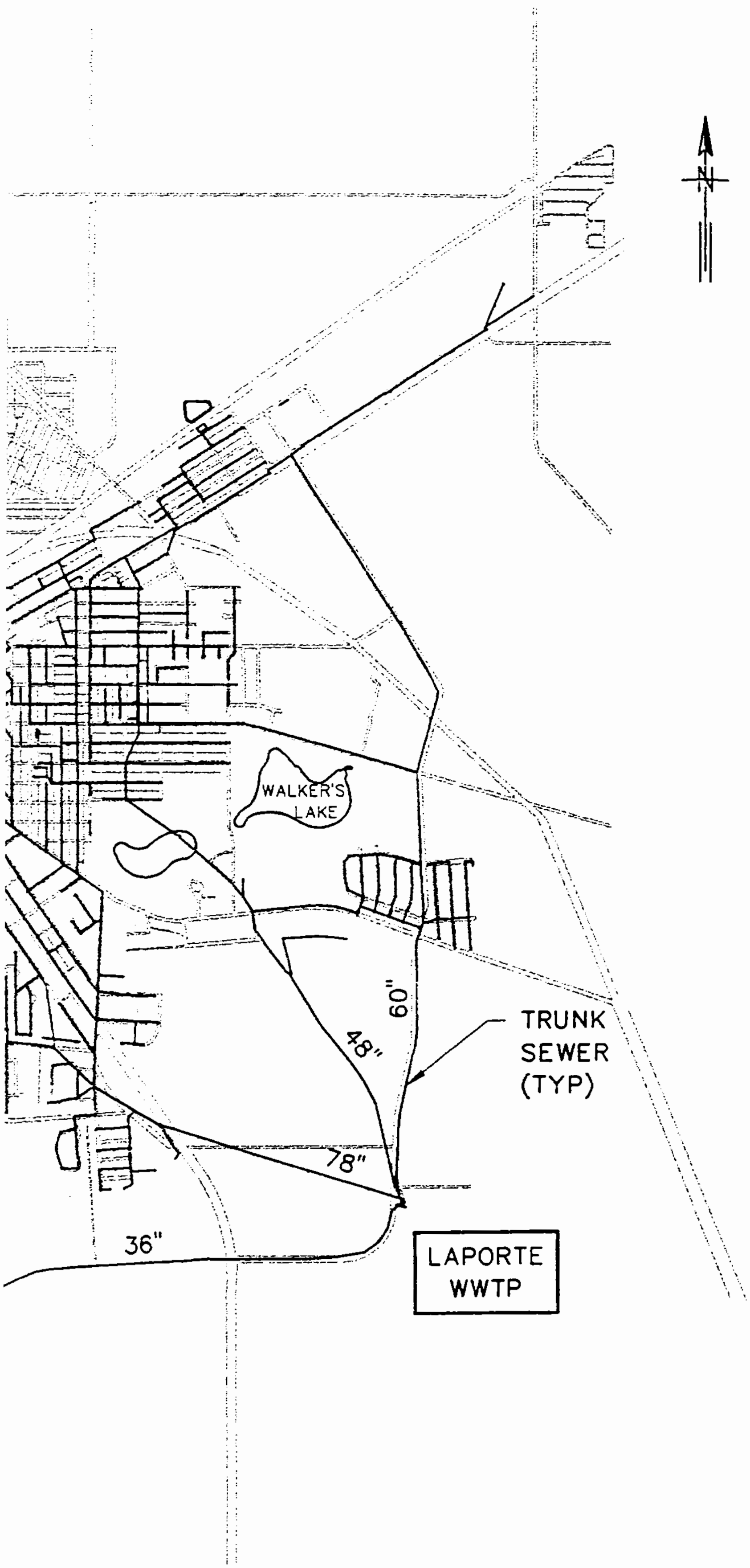
FIGURE IX-3



AND RAIN GAGE LOCATION

CITY OF LAPORTE
CSO OPERATIONAL PLAN
UPDATE TO MEET MINIMUM
CONTROL NO. 7, 8 AND 9

FIGURE IX-4

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
CSO DISCHARGE MONITORING REPORT

Monitoring Period: Jun-97 No CSO Discharge Occurred:

Name:	LaPorte WWTP	Permit #:	IN0025577
Address:	2101 Boyd Blvd.		
City:	LaPorte, IN 46350		
Phone:	(219)362-2354	Fax:	(219)362-1018

Precipitation Event			CSO Outfall	Discharge Begin		Discharge End		Event Duration	Event Discharge
Date	Time	Inches	#	Date	Time	Date	Time	(hours)	(MG)
06/02/97	01:30 AM	0.29	See Note	06/02/97	02:52 AM	06/02/97	07:10 AM	4.3	0.66
06/06/97	04:00 AM	1.18	See Note	06/06/97	04:54 AM	06/06/97	04:22 PM	11.5	7.08
06/16/97	04:00 AM	1.08	See Note	06/16/97	05:51 AM	06/16/97	02:20 PM	8.5	5.90
06/21/97	06:30 AM	0.18	See Note	06/21/97	10:00 AM	06/21/97	12:26 PM	2.4	0.23
06/25/97	03:00 PM	0.46	See Note	06/25/97	03:33 PM	06/25/97	06:16 PM	2.7	0.43
06/30/97	04:30 PM	2.07	See Note	06/30/97	06:18 PM	07/01/97	02:46 AM	8.5	10.39

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	DATE
Jerry P. Jackson	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. & 1001 AND 33 U.S.C. & 1319. (penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)		
TYPED OR PRINTED		SIGNATURE	YEAR MO DAY

Notes

LaPorte diverts excessive wet weather flows to the CSO Lagoon, located at the WWTP. The CSO Lagoon overflows via Outfall 002 to LaPorte's receiving stream (Travis Ditch). As spring flows in the CSO Lagoon cause a constant overflow at Outfall 002, LaPorte reports duration of the diversions to the Lagoon instead of the overflow at Outfall 002.

SAMPLE MONTHLY OVERFLOW LAGOON MONITORING REPORT

CITY OF LAPORTE
CSO OPERATIONAL PLAN
UPDATE TO MEET MINIMUM
CONTROL NO. 7, 8 AND 9

GREELEY AND HANSEN

FILE: J:\JOBS\LAPORTE\616HR07 SCALE: 1:1 08/06, 1997 at 11:16 •13_c4a•

City of LaPorte
INDIANA
Wastewater Department

2101 Boyd Blvd.
LaPorte, IN 46350
(219)362-2354
(219)362-1018 FAX
07/28/01

Stream Reach Characterization and Evaluation Report

I. ABSTRACT

The City of LaPorte studied discharges from its only combined sewer overflow, which discharges at the headwaters of Travis Ditch, a tributary of the Kankakee River. Overflows occurred 5 times during the 15 month study period, with a total discharge duration of 6.4 days. CSO pollutant concentrations were compared to LaPorte's wastewater treatment plant NPDES discharge limitations. CSO pollutant concentrations exceeded NPDES limitations for lead, cyanide, total suspended solids, ammonia, E. coliform, dissolved oxygen, and pH. Wet weather flows were tabulated and charted.

II. METHODOLOGIES AND SYSTEM DESCRIPTION

a. Sampling and Analysis

All five CSO events between 4/20/2000 and 7/07/2001 were sampled. During the first two events(4/20/2000 and 6/24/2000), 10 grab samples were taken every 15 minutes from Outfall 002. A composite was created from the grab samples. The composite sample was analyzed for cadmium, lead, nickel, zinc, copper, chromium, CBOD, TSS, pH, and Ammonia. Grab samples were analyzed for E. coliform. and dissolved oxygen.

As a result of discussions with IDEM, the following three events were sampled and analyzed in a different manner. Grab samples were taken every 15 minutes from Outfall 002 for 120 minutes(8 samples). Each grab sample was analyzed for cadmium, lead, nickel, zinc, copper, chromium, CBOD, TSS, pH, ammonia, E. coliform, and dissolved oxygen.

Test protocols were identical to those required by LaPorte's NPDES permit.

Parameter	Methodology	Notes
Cadmium	EPA 213.2	Total Recov. Metal
Lead	EPA 239.2	Total Recov. Metal
Nickel	EPA 200.7	Total Recov. Metal
Zinc	EPA 200.7	Total Recov. Metal
Copper	EPA 200.7	Total Recov. Metal
Chromium	EPA 200.7	Total Recov. Metal
CBOD	Standard Methods(18th ed) 5210 B	
TSS	Standard Methods(18th ed) 2450 D	
pH	Standard Methods(18th ed) 4500-H+ B	
Ammonia	Standard Methods(18th ed) 4500-NH3 D	
E. coliform	EPA 1103.1	
Dissolved Oxygen	Standard Methods(18th ed) 4500-O G	

b. CSO Flow Measurement

CSO flows were calculated from level measurements of CSO flow over a 20 foot wide rectangular compound weir. The compound weir contains a 4 foot wide by 1/3 foot deep notch used for measuring small flows. Level measurement was made using a Miltronics Hydroranger ultrasonic level meter. Level signal is transmitted to the Wastewater Treatment Plants(WWTP)'s SCADA system, where flow is calculated according to the following formula:

For the 4 foot wide notch portion

$$\text{Flow} = 6.46*H^{1.5} - 0.43*H^{2}$$

For the 17 foot section

$$Flow = 36.59*(H-1/3)^{1.5}$$

Where Flow [=] MGD
H [=] Height over weir, feet

Weir formulas were generated from the <u>ISCO Open Channel Flow Measurement Handbook</u>. CSO level is charted mechanically and electronically. A PLC calculates the CSO flow and stores the data electronically.

<u>c. Rainfall Measurement</u>
Rainfall measurements are provided by the City of LaPorte Waterworks, an official National Weather Service Observation Station(Index # 12-4837-1). The weather station is well located to monitor LaPorte's combined sewer area.

<u>d. CSO Lagoon Operation</u>
During wet weather, flows in excess of the WWTP's 9.0 MGD wet weather capacity are diverted to the 17 acre CSO Lagoon. The 17 acre CSO Lagoon can store 2 feet(11 MG) prior to overflowing outfall 002 to Travis Ditch. Location maps and flow schematics for the WWTP, CSO Lagoon, and Outfalls are contained in Appendix #A. Following rain events, combined flows stored in the lagoon are pumped to the WWTP headworks. Both pumps are utilized to return stored flows to the WWTP, resulting in a return rate of 2.4 MGD.

<u>e. Outfall Locations</u>
LaPorte's Wastewater Treatment Plant(WWTP) discharge(Outfall 001) and CSO form the headwaters of Travis Ditch. See Appendix A for location maps. Flow at the headwaters of Travis Ditch consists solely of wastewater treatment plant effluent and, during CSO events, combined sewer overflow from Outfall 002(CSO Lagoon).

<u>f. Sewer System Description</u>
LaPorte's sewer system contains 69.4 miles of combined sewers(69%) and 31.44 miles of sanitary sewer(31%). Portions of LaPorte's sewer system were constructed prior to 1900. Portions of the brick "big sewer" that served the community prior to 1911 are still operation. In 1901, LaPorte began construction of the 78 inch concrete "main" sewer began.

LaPorte is centered around pothole lake system. Natural drainage was generally to the lake system and isolated wetlands scattered throughout the city. The only streams that carry water out of the LaPorte are remote from the city center. The Shurz ditch begins 2.0 miles from the city center. Travis Ditch begins 2.8 miles the city center. Because outlets(streams, ditches, etc.) for sewage were far removed and it was undesireable to discharge sewage into the lakes, LaPorte constructed large diameter mains(78", 48", 36", and 60") to convey combined flows out of the city for disposal. The WWTP was constructed in 1939.

LaPorte modeled its sewer system to develop a replacement sewer design for the Fox Street Combined Sewer. The Fox Street project replaced a failing 100 year old sewer in more efficiently conveys combined flows to the CSO Lagoon for storage. The model was also used to develop the Clark Park Offline Storage Facility design and the Darlington/Factory St Sewer Separation. Clark Park and Darlington/Factory projects are both designed to reduce basement backup and street flooding. All three projects have been funded by the State Revolving Loan Fund(SRF)

III. Discussion

a. CSO Volume and Frequency

The following table describes the volume, frequency, and duration of CSO events for the years 1996-2001(partial year to July 31).

Year	CSO Events (#)	Calendar Days in which CSO occurred	Total Discharge Duration (days)	Volume (MG)
1996	46	165	No Data	211.74
1997	52	209	197.50	151.00
1998	32	74	50.36	70.80
1999	3	6	4.90	12.02
2000	3	7	3.70	10.30
2001[1]	2	5	2.56	7.66

[1] Partial Year - January to July 31

Construction of the CSO Lagoon Return pump station took place in 1998 and operated for the first full year in 1989. The pump station allows the lagoon to be drawn down and store up to 10 million gallons when the treatment plant capacity is exceeded during storm events. Construction of the pump station eliminated 93% of CSO discharges by volume.

Flows from significant rain events are tabulated and graphed in Appendix B for the period 1996 to July 2001. Linear regression was used to draw a best fit line through the data. With 11 million gallons of storage and approximately 1 additional million gallons of flow through the WWTP, the system can usually hold and treat 12 million gallons of flow prior to a combines sewer overflow occurring. The correlation line suggests that a rain of about 1.6 inches can be held prior to overflow. This result agrees with previous experience. Note that the volume of combined flow delivered to the WWTP varies considerable for a given size storm.

b. CSO Flows For Event Studied

Appendix C contains charts showing CSO flow and WWTP flow for each of the 5 events studied. The WWTP influent flow is controlled by two gates, which are modulated by the WWTP SCADA system to maintain a chosen influent flow. The system allows the WWTP to automatically operate at maximum flow without operator intervention. Currently, the influent flow controller setpoint is 9.7 MGD.

CSO flow can be a significant percentage of the total flow in Travis Ditch at its Travis Ditch's beginning. The following table displays the maximum proportion of CSO flow in Travis Ditch as a percentage.

Maximum Proportion of CSO in Travis Ditch Flow

Date	Time	WWTP Flow (MGD)	WWTP Portion of Travis Ditch Total Flow	CSO Flow (MGD)	CSO Portion of Travis Ditch Total Flow	Travis Ditch Total Flow (MGD)
4/20/00	20:35	8.62	74%	3.05	26%	11.67
6/24/00	01:08	9.06	35%	16.70	65%	25.76
9/12/00	05:46	8.96	27%	24.56	73%	33.52
2/25/01	00:12	8.85	40%	13.46	60%	22.31
7/7/01	09:39	8.94	31%	19.53	89%	28.47

WWTP effluent flow varies periodically with discharges from the batch process fixed-bed trickling filter. Consequently, effluent flow is periodically higher and then lower than the influent flow.

When wet weather flow from the sewer system subsides, the CSO Lagoon pumps start automatically. The WWTP influent flow usually falls well below maximum capacity(9.0 MGD) while the lagoon is being emptied as the CSO Lagoon pumping station pumping capacity is not large enough to keep the WWTP at maximum. Increasing the CSO Lagoon pumping station capacity would decrease the time needed to empty the lagoon. With current pump capacity, it takes about 5 days to empty the lagoon.

b. CSO Quality

Water quality data is contained in Appendix D. Discussion of the water quality data follows on a parameter by parameter basis.

Strength of CSO discharge did not exhibit the "first flush" behavior common in CSO's located in the collection system. The CSO Lagoon accumulates 11 MG of combined sewage prior to discharge, so that the first flush is diluted with later flows.

Floatables

The outlet of the CSO Lagoon is baffled to prevent floatables from being discharged to Travis Ditch. Floatables become trapped between the discharge weir and the baffle when the lagoon is lowered and then filled. This small amount of trapped floatables is then discharged when a CSO event occurs.

Cadmium, Nickel, Zinc, Copper, Chromium, CBOD

All samples were below WWTP discharge limitations.

Lead

Lead was a significant pollutant in the two 2001 events, exceeding the WWTP NPDES daily maximum in both of the events. For one sample from the event of 2/24/01, the lead concentration was slightly more than double the daily maximum limitation. Dilution by the WWTP flow is insufficient to consistently gain compliance for lead.

Samples of sludge from the CSO lagoon have show lead concentration exceeding the 503 land application ceiling concentration. As the WWTP's sludges have historically had low lead concentrations, the CSO Lagoon lead may result from run-off, possible due to leaded gasoline.

Cyanide

Two samples for the event of 2/24/01 had cyanide concentrations very slightly above the daily maximum value. AMPCOR II, a metal plater in LaPorte that uses cyanide in its process, reported concentrations well below its limit for the month of February. Monitoring done by the WWTP also showed AMPCOR II's cyanide concentrations well below their permit limit.

LaPorte has demonstrated that ferro cyanide compounds in road salt can cause the WWTP to exceed its discharge limitation. It is likely the source of cyanide in this winter CSO event was road salt.

TSS

Four of five CSO events exceeded the WWTP NPDES weekly maximum concentration for total suspended solids. TSS concentration during the event of 2/24/01 were much higher than other events. TSS concentrations exceeded the limitation by more than 4 times. This event was the only winter event - the flow of cold water into the shallow lagoon likely was not conducive to good settling. Dilution by WWTP flow was insufficient to gain compliance.

Ammonia

Ammonia concentrations consistently exceeded the WWTP NPDES weekly maximum limitation.   Dilution by the WWTP flow would result in compliance for the majority of samples.

E. Coliform

E. coliform concentrations were consistently greater than 200,000 colonies per 100 ml. Dilution by WWTP flow was insufficient to gain compliance.

Dissolved Oxygen

Dissolved oxygen concentrations were less than the WWTP NPDES daily minimum limitation for all events except the winter event of 2/2/4/01. Dilution by WWTP flow generally insufficient to gain compliance.

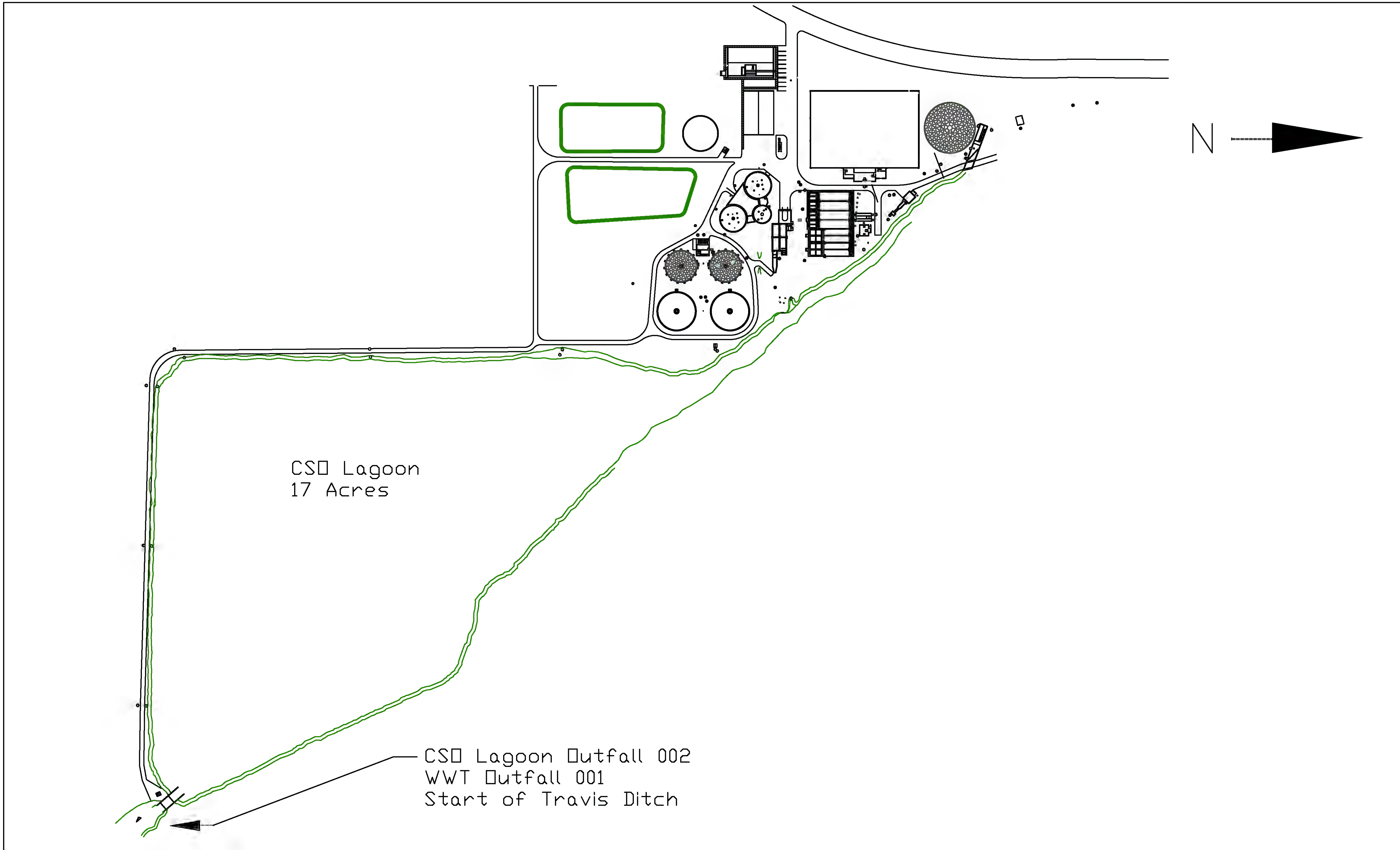
pH

The WWTP NPDES weekly minimum limitation was exceeded during the first three samples of the winter event(2/24/01). Dilution by WWTP flow was sufficient to gain compliance.

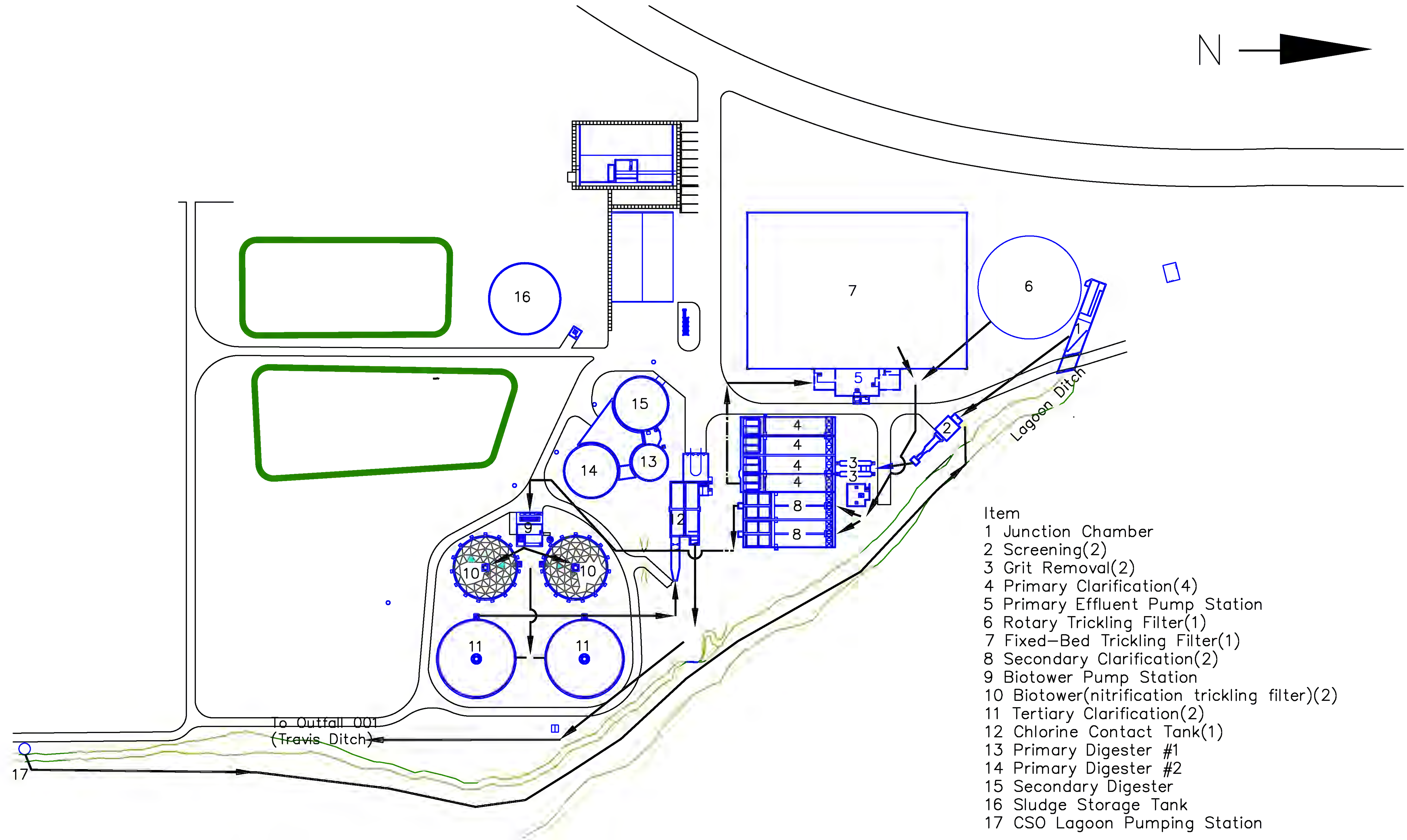
IV. Summary

The Stream Reach Characterization and Evaluation demonstrated that discharges from CSO outfall 002 do not meet water quality standards lead, cyanide, TSS, ammonia, E. coliform, dissolved oxygen, and pH. Travis ditch stream quality is impaired by these discharges an average of 3.7 days per year.

Appendix A - Location Maps and Flow Diagrams



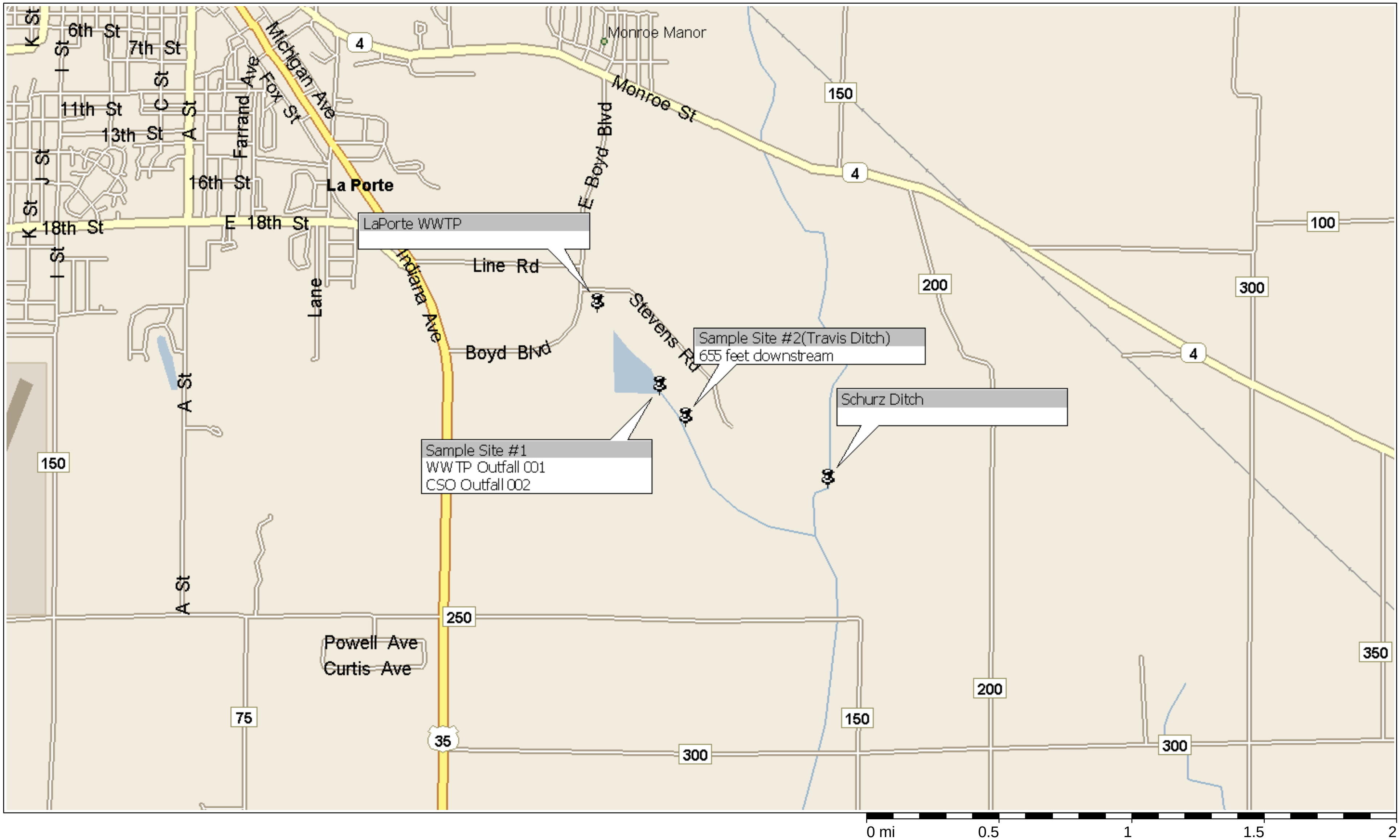
LaPorte WWTP	LAPORTE WWTP	DRAWN BY DMW/JPJ	SCALE: 1" = 2400'	DATE:07/30/2001	PAGE 1/1

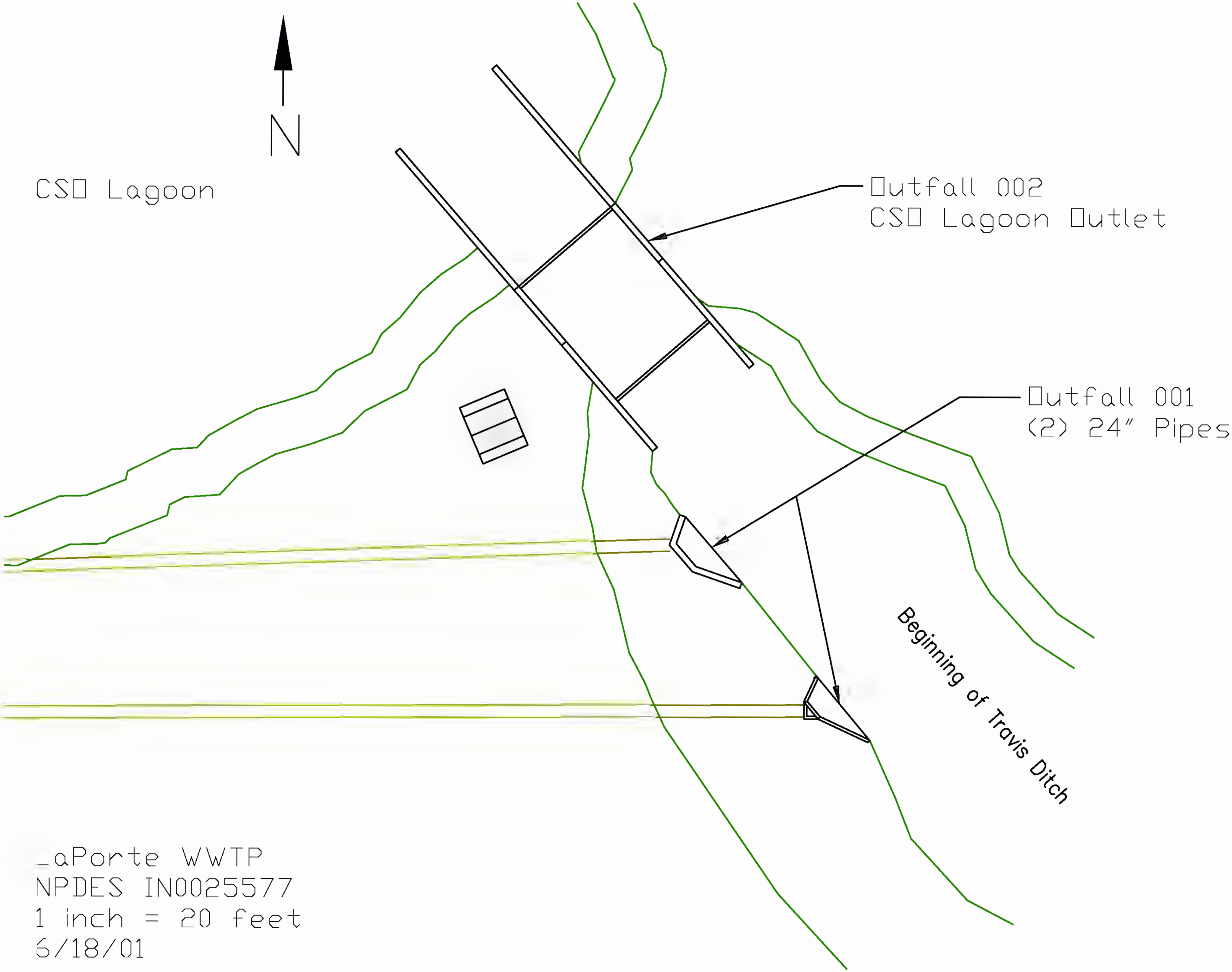


Item
1 Junction Chamber
2 Screening(2)
3 Grit Removal(2)
4 Primary Clarification(4)
5 Primary Effluent Pump Station
6 Rotary Trickling Filter(1)
7 Fixed–Bed Trickling Filter(1)
8 Secondary Clarification(2)
9 Biotower Pump Station
10 Biotower(nitrification trickling filter)(2)
11 Tertiary Clarification(2)
12 Chlorine Contact Tank(1)
13 Primary Digester #1
14 Primary Digester #2
15 Secondary Digester
16 Sludge Storage Tank
17 CSO Lagoon Pumping Station

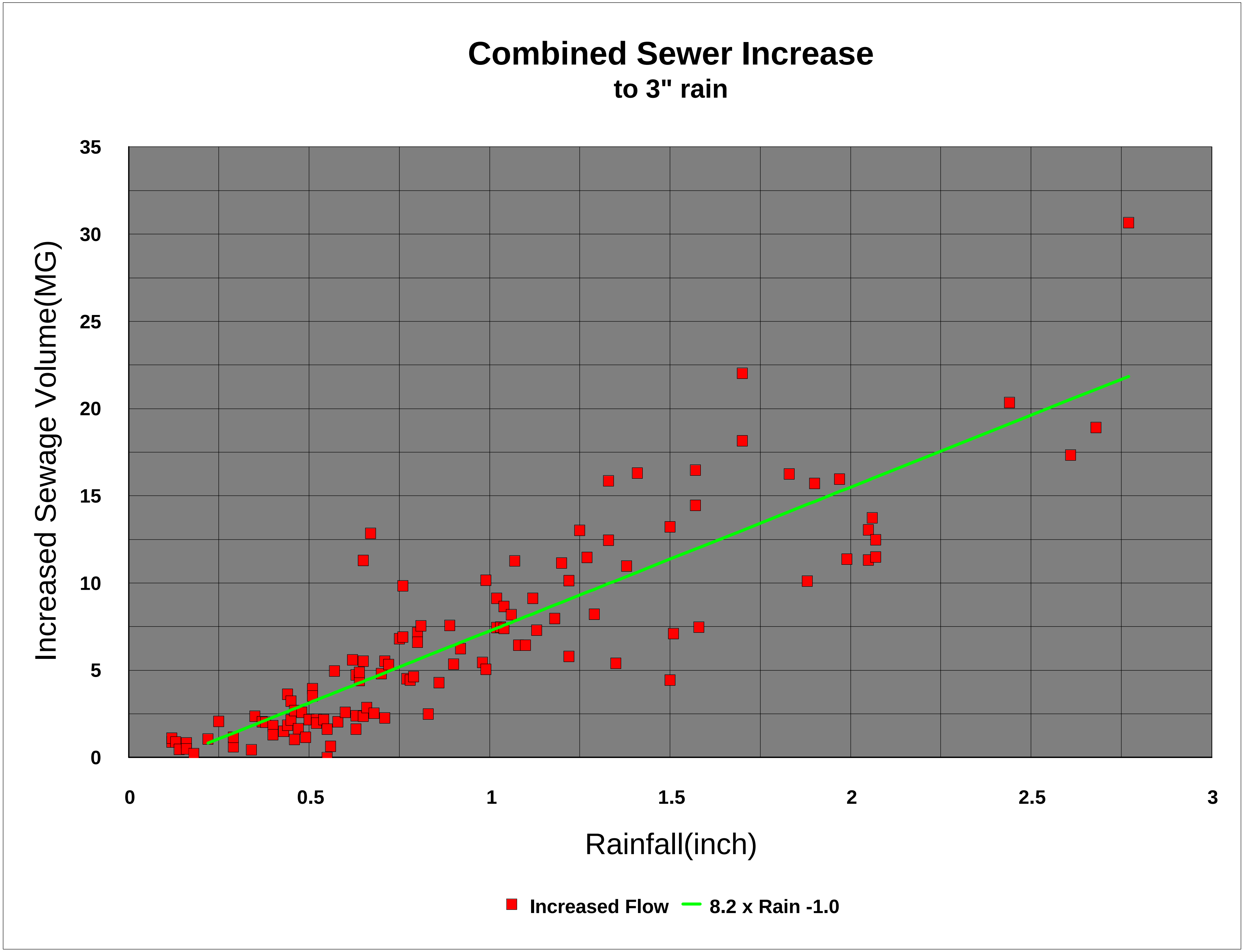
Major Conduits	LAPORTE WWTP	DRAWN BY DMW/JPJ	SCALE: 1" = 1200'	DATE: 8/09/99	PAGE 1/1

LP_WWTP_Outfall

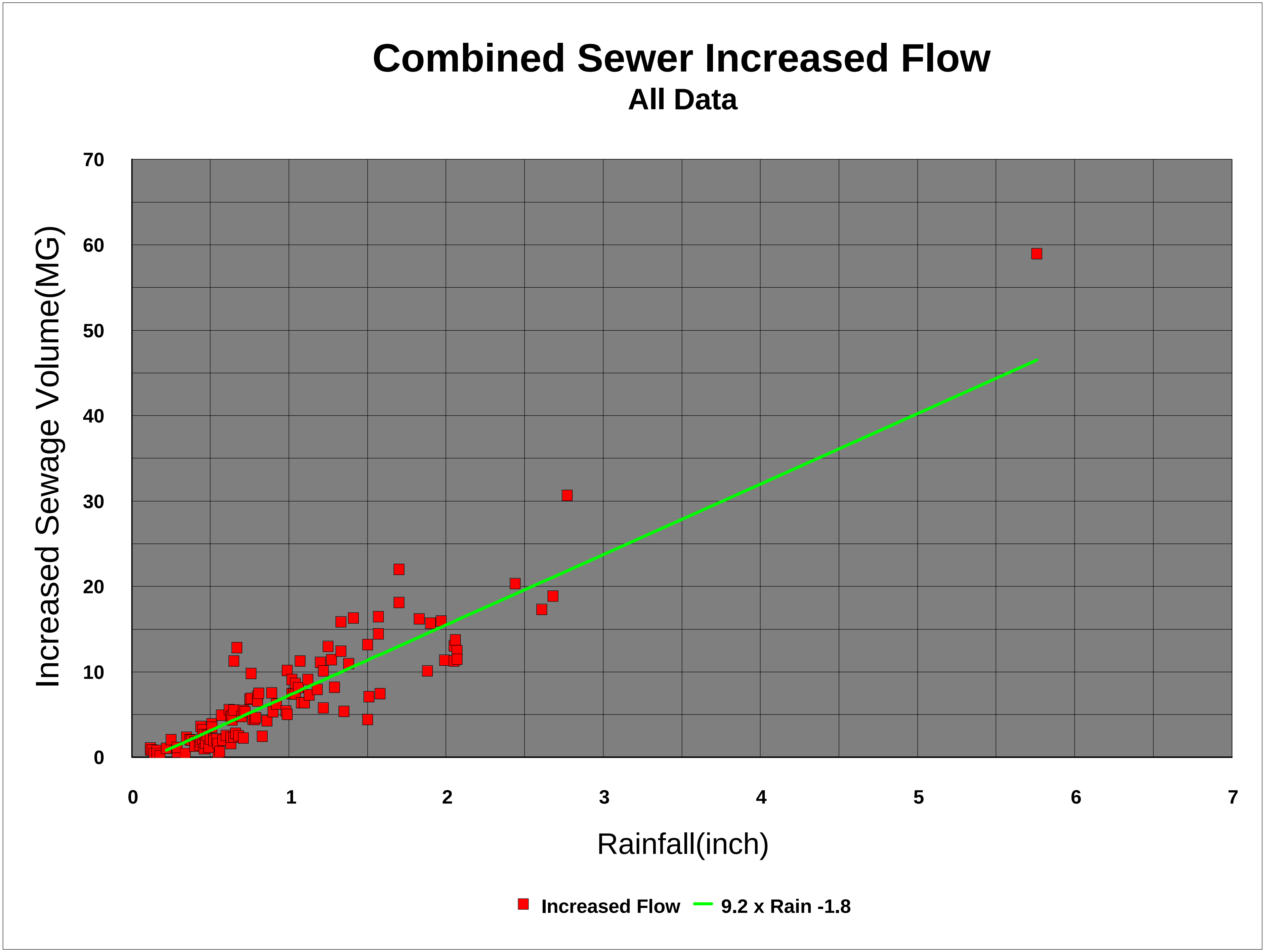



N
CSO Lagoon
Outfall 002
CSO Lagoon Outlet
Outfall 001
(2) 24" Pipes
Beginning of Travis Ditch
LaPorte WWTP
NPDES IN0025577
1 inch = 20 feet
6/18/01

Appendix B - Wet Weather Flow Historical Data



Combined Sewer Increase
to 3" rain
Increased Sewage Volume(MG)
35
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5
3
Rainfall(inch)
Increased Flow
8.2 x Rain -1.0


Combined Sewer Increased Flow
All Data
Increased Sewage Volume(MG)
Rainfall(inch)
0
10
20
30
40
50
60
70
0
1
2
3
4
5
6
7
Increased Flow
9.2 x Rain -1.8

2) stored volume = final level - initial level
3) if overflow occurs, stored = weir height - initial level
4) Event total = increased plant flow + stored volume + cso volume

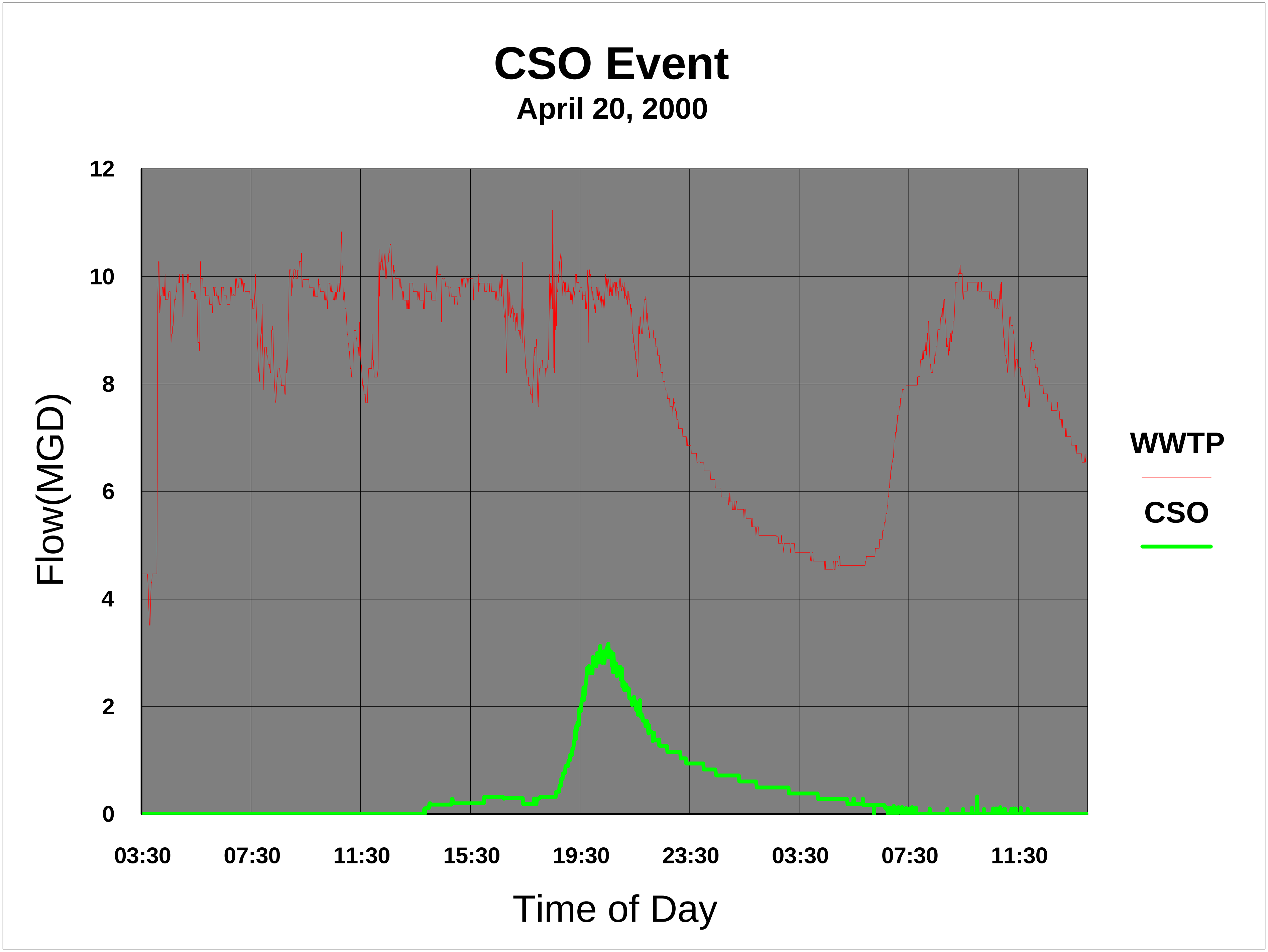
Date	Rainfall (inch)	Increased Plant Flow (mg)	Increased CSO (mg)	Initial Lagoon Level (ft)	Final Lagoon Level (ft)	Volume Stored (mg)	Event Total Flow (mg)	Recursion Line #1	Recursion Line #1	Notes
06/01/1997	0.12	0.10	0.80				0.90			
03/24/1997	0.12	0.85	0.29				1.13			
08/14/1999	0.13	0.36	0.54				0.90			
04/11/1997	0.14	0.22	0.27				0.49			
05/15/1997	0.16	0.77	0.08				0.85			
07/27/1997	0.16	0.01	0.49				0.50			
06/21/1997	0.18	0.00	0.23				0.23			
11/17/1996	0.22	0.62	0.46				1.07	0.82	0.21	
06/14/2000	0.25	0.30	0.00	1.40	1.72	1.77	2.07	1.07	0.49	
10/22/1996	0.29	0.38	0.26				0.64	1.39	0.86	Two rains, 10/22/96(0.29"), 10/23/96(0.11")
05/07/1997	0.29	0.33	0.85				1.18	1.39	0.86	
01/15/1997	0.34	0.20	0.26				0.46	1.81	1.32	
03/09/1997	0.35	0.94	1.44				2.37	1.89	1.41	
05/18/1997	0.37	0.67	1.40				2.07	2.05	1.59	
12/22/1997	0.38	1.17	0.25	0.89	1.00	0.61	2.03	2.14	1.68	
10/13/1997	0.40	1.57	0.28				1.85	2.30	1.87	
06/26/2000	0.40	0.00	0.44	2.84	3.39	0.89	1.33	2.30	1.87	
12/24/1997	0.43	0.56	0.95	1.00	1.00	0.00	1.51	2.55	2.14	
02/04/1997	0.44	1.59	2.06				3.64	2.63	2.23	
10/08/1996	0.44	1.54	0.31				1.85	2.63	2.23	
06/09/1998	0.45	0.55	0.00	0.88	1.17	1.61	2.16	2.71	2.32	
09/20/1998	0.45	0.65	0.00	0.16	0.63	2.60	3.25	2.71	2.32	
11/29/1996	0.46	2.01	0.68				2.69	2.80	2.42	Two rains, 11/29/96(0.36"), 11/30/96(0.10")
06/25/1997	0.46	0.00	0.44	0.89	1.00	0.61	1.05	2.80	2.42	
07/21/1997	0.47	0.21	1.46				1.67	2.88	2.51	
04/09/1998	0.48	0.00	0.31	1.53	2.21	2.60	2.60	2.96	2.60	
04/24/1997	0.49	0.47	0.71				1.18	3.04	2.69	
08/21/1997	0.50	0.60	1.58				2.18	3.13	2.78	
03/13/1997	0.51	1.30	2.66				3.96	3.21	2.87	
12/11/1996	0.51	1.75	1.79				3.54	3.21	2.87	
02/16/1998	0.52	1.33	0.00	0.10	0.26	0.89	2.21	3.29	2.97	Two rain events, 02/16/98(0.18"), 02/17/98(0.34")
05/24/1998	0.52	0.00	0.00	0.95	1.31	1.99	1.99	3.29	2.97	
07/18/1997	0.54	0.00	1.74	0.92	1.00	0.44	2.18	3.46	3.15	
06/18/1998	0.55	0.00	0.00			0.00	0.00	3.54	3.24	
10/29/1996	0.55	0.68	0.97				1.65	3.54	3.24	
03/05/1999	0.56	0.00	0.00	0.13	0.25	0.66	0.66	3.62	3.33	
07/05/2000	0.57	1.47	0.00	1.66	2.29	3.49	4.96	3.70	3.42	
05/05/1997	0.58	0.38	1.67				2.05	3.79	3.52	
07/22/1998	0.60	0.00	0.00	1.12	1.59	2.60	2.60	3.95	3.70	
07/06/1997	0.62	0.38	5.24				5.62	4.12	3.88	
07/10/2000	0.63	2.32	0.00	1.27	1.71	2.44	4.76	4.20	3.97	
05/24/1997	0.63	0.36	1.28				1.64	4.20	3.97	Two rain events, 5/24/97(0.25"), 2/25/97(0.38")
02/26/2000	0.63	0.96	0.00	0.25	0.51	1.44	2.40	4.20	3.97	
08/22/1996	0.64	0.30	4.12				4.42	4.28	4.07	
04/20/1998	0.64	1.55	0.24	1.44	2.14	3.10	4.89	4.28	4.07	
11/09/1998	0.65	2.88	0.00	0.13	1.65	8.42	11.30	4.36	4.16	
09/17/1997	0.65	-0.79	3.17				2.38	4.36	4.16	

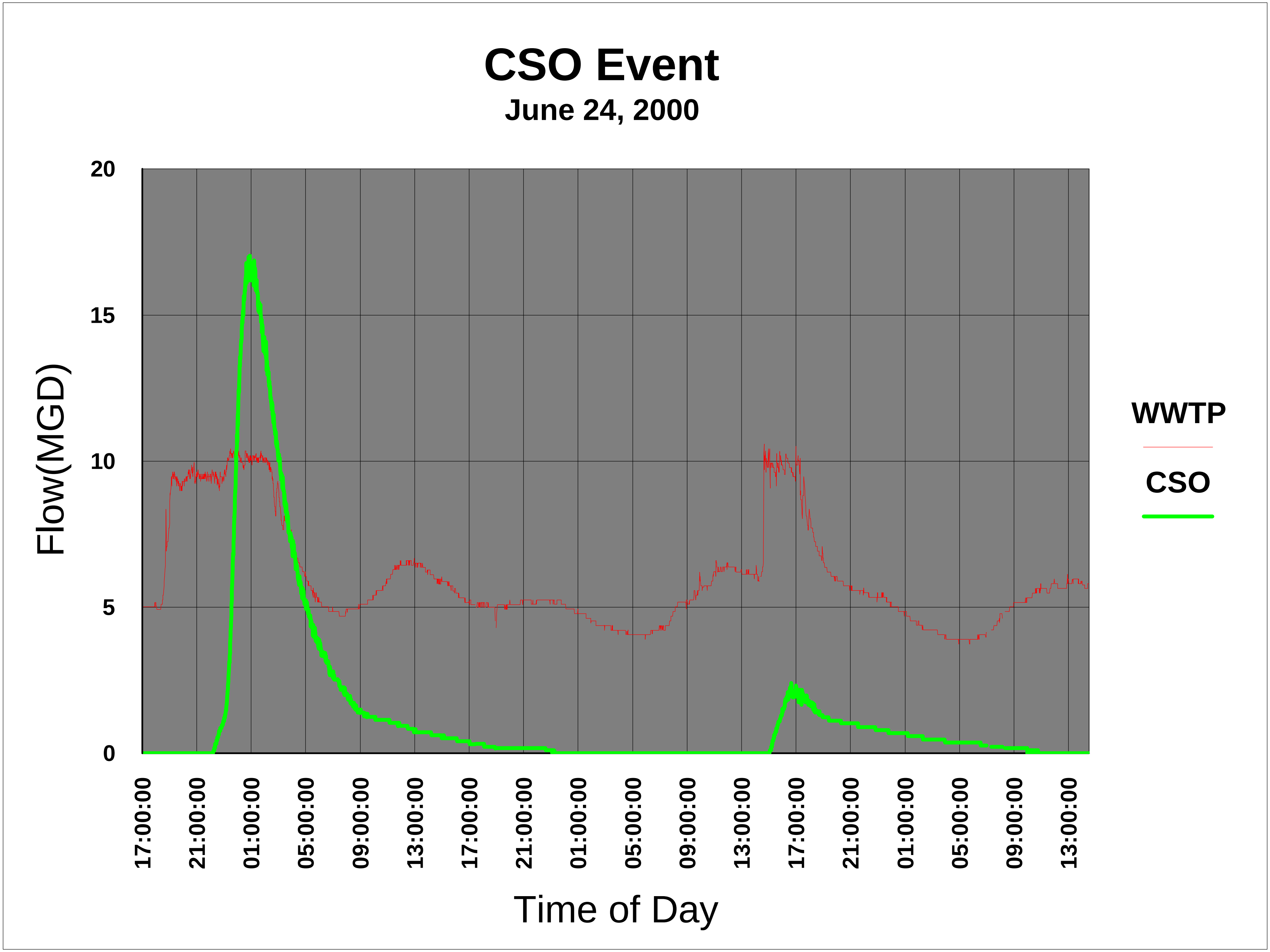
2) stored volume = final level - initial level
3) if overflow occurs, stored = weir height - initial level
4) Event total = increased plant flow + stored volume + cso volume

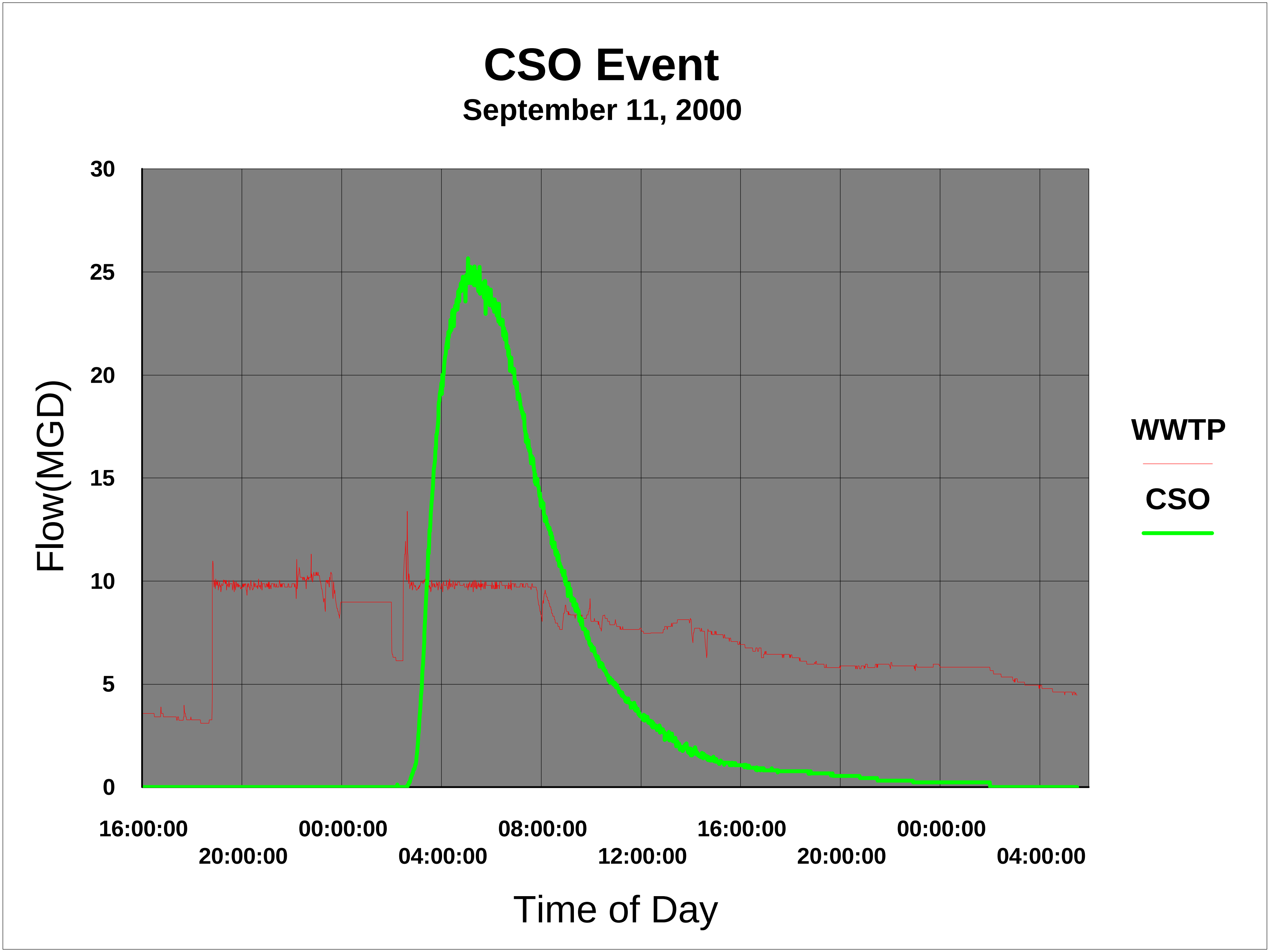
Date	Rainfall (inch)	Increased Plant Flow (mg)	Increased CSO (mg)	Initial Lagoon Level (ft)	Final Lagoon Level (ft)	Volume Stored (mg)	Event Total Flow (mg)	Recursion Line #1	Recursion Line #1	Notes
10/06/1998	0.65	1.61	0.00	0.14	0.85	3.93	5.54	4.36	4.16	
08/23/1998	0.66	2.86	0.00			0.00	2.86	4.45	4.25	two days
01/21/1997	0.67	5.18	7.68				12.86	4.53	4.34	Two rains, 1/21/97(0.56"), 1/22/97(0.11")
04/05/1997	0.68	-0.11	2.65				2.55	4.61	4.43	
05/23/1999	0.70	0.67	0.00	0.23	0.98	4.15	4.82	4.78	4.62	
08/24/1997	0.71	-0.05	2.33				2.28	4.86	4.71	
03/31/1998	0.71	1.20	4.34	2.00	2.00	0.00	5.54	4.86	4.71	Two rain events, 03/08/98(1.08"), 03/09/98(0.80")
07/14/2000	0.72	1.35	0.00	1.21	1.93	3.99	5.34	4.94	4.80	
05/14/2001	0.75	1.95		1.23	2.11	4.87	6.82	5.19	5.08	
01/17/1999	0.76	2.60	0.00	0.36	1.67	7.26	9.86	5.27	5.17	
08/17/2000	0.76	1.33	0.00	1.42	2.43	5.59	6.92	5.27	5.17	
03/28/1997	0.77	0.67	3.85				4.51	5.35	5.26	
11/01/1999	0.78	1.29	0.00	1.17	1.74	3.16	4.45	5.43	5.35	
12/01/1996	0.79	1.80	2.86				4.66	5.52	5.44	
10/03/1999	0.80	1.56	0.00	0.15	1.16	5.59	7.15	5.60	5.53	
08/19/1999	0.80	1.64	0.00	0.20	1.10	4.99	6.63	5.60	5.53	
03/28/1998	0.81	0.51	3.95	1.44	2.00	3.10	7.55	5.68	5.63	
06/12/2000	0.83	1.23	0.00	0.28	0.51	1.27	2.50	5.85	5.81	
10/26/1997	0.86	1.88	1.87	0.90	1.00	0.55	4.30	6.09	6.08	
06/21/2001	0.89	1.55		1.09	2.18	6.04	7.59	6.34	6.36	
05/28/1997	0.90	1.33	4.03				5.37	6.42	6.45	Two rain events, 5/28/97(0.57"), 2/29/97(0.33")
07/31/1999	0.92	0.27	0.00	0.26	1.34	5.98	6.25	6.59	6.63	
05/09/2000	0.98	1.63	0.00	0.12	0.81	3.82	5.45	7.08	7.18	
02/10/1998	0.99	0.36	0.03	0.15	1.00	4.71	5.08	7.17	7.28	Two rain events, 02/10/98(0.14"), 02/11/98(0.85")
04/13/1998	0.99	0.00	6.74	1.38	2.69	3.43	10.18	7.17	7.28	
06/05/2001	1.02	2.59		1.12	2.00	4.87	7.46	7.41	7.55	
07/03/2000	1.02	2.60	0.00	1.29	2.47	6.54	9.14	7.41	7.55	
08/06/2000	1.03	0.67	0.00	1.34	2.57	6.81	7.48	7.50	7.64	
05/07/1998	1.04	0.89	1.42	1.08	2.40	5.10	7.41	7.58	7.74	
08/24/1999	1.04	1.54	0.04	0.19	1.47	7.09	8.67	7.58	7.74	
06/20/2000	1.06	0.55	0.00	1.49	2.87	7.64	8.19	7.74	7.92	CSO Lagoon meter zero lowered 1 foot to allow measurement of lower pumpdowr
12/23/1996	1.07	3.28	8.01				11.29	7.83	8.01	
06/16/1997	1.08	0.42	6.02				6.44	7.91	8.10	
08/13/1999	1.10	2.51	0.00	0.20	0.91	3.93	6.44	8.07	8.29	
06/13/2000	1.12	1.43	0.00	0.52	1.91	7.70	9.13	8.24	8.47	
06/15/2001	1.13	1.50		1.48	2.53	5.82	7.32	8.32	8.56	
06/06/1997	1.18	0.67	7.32				7.99	8.73	9.02	
07/07/1998	1.20	1.00	7.61	1.54	3.01	2.55	11.15	8.90	9.20	
06/05/2000	1.22	3.07	0.00	0.20	1.48	7.09	10.16	9.06	9.39	
09/26/1996	1.22	3.50	2.32				5.82	9.06	9.39	Two rains, 9/26/96(0.73"), 9/27/96(0.49")
08/12/1997	1.25	1.33	11.70				13.03	9.31	9.66	
01/21/1999	1.27	3.75	2.85	1.12	2.50	4.87	11.47	9.47	9.84	
06/26/1999	1.29	1.25	0.00	0.60	1.86	6.98	8.23	9.64	10.03	
06/11/2001	1.33	6.70		1.17	2.21	5.76	12.46	9.97	10.39	Two rain events, 6/11/01(0..85"), 6/12/01(0.48")
02/26/1997	1.33	4.03	11.84				15.87	9.97	10.39	Two rain events, 2/26/97(1.21"), 2/27/97(0.12")
04/30/1997	1.35	0.58	4.82				5.40	10.13	10.58	
08/07/1996	1.38	1.60	9.40				11.00	10.38	10.85	Two rains, 8/7/96(0.85"), 8/8/96(0.53")

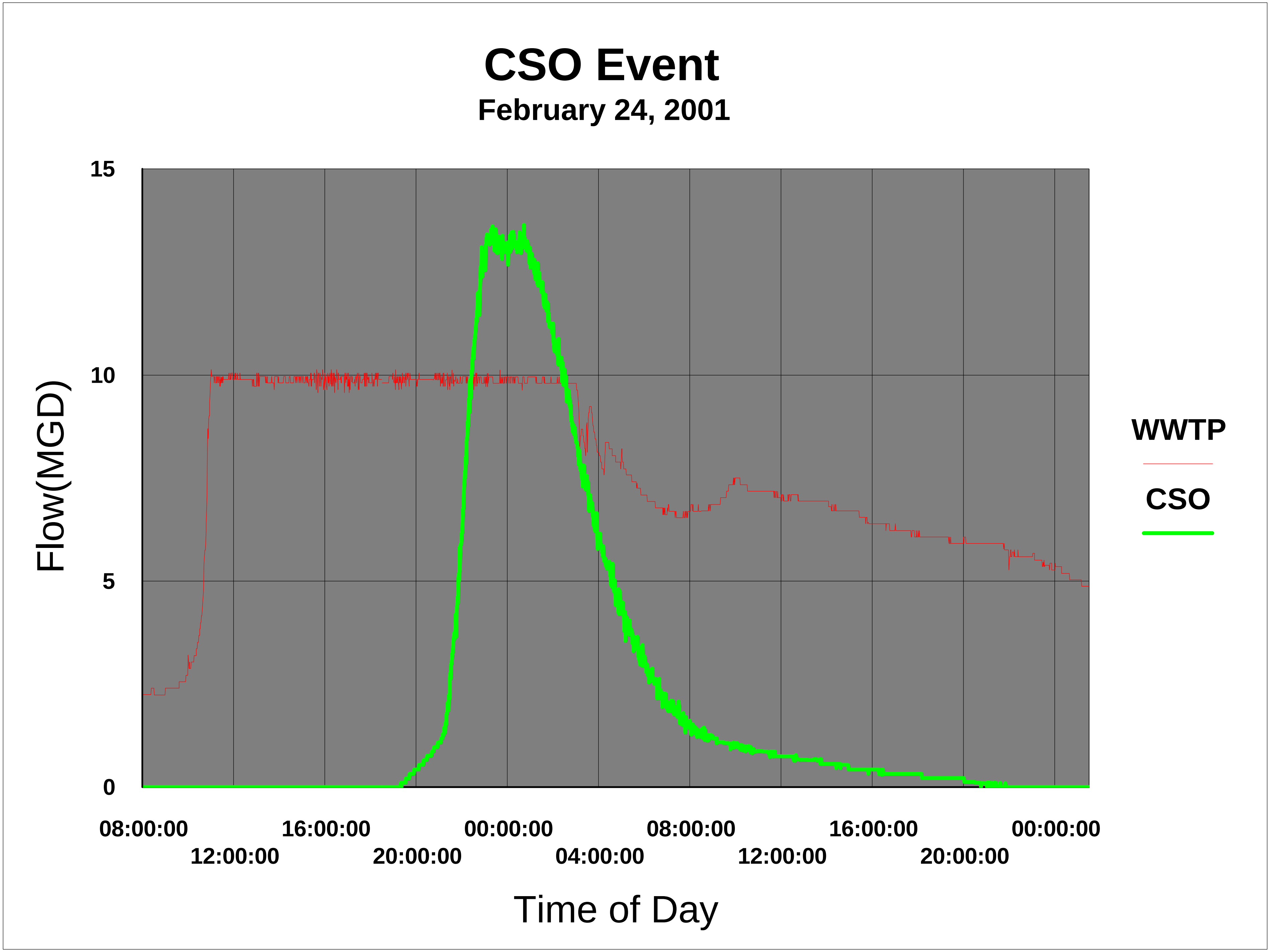
Date	Rainfall (inch)	Increased Plant Flow (mg)	Increased CSO (mg)	Initial Lagoon Level (ft)	Final Lagoon Level (ft)	Volume Stored (mg)	Event Total Flow (mg)	Recursion Line #1	Recursion Line #1	2) stored volume = final level - initial level 3) if overflow occurs, stored = weir height - initial level 4) Event total = increased plant flow + stored volume + cso volume Notes
08/09/1998	1.41	3.68	7.94	1.15	3.01	4.71	16.32	10.63	11.13	
04/05/2001	1.50	3.98		1.04	2.71	9.25	13.23	11.37	11.95	Two rain events, 4/05/01(0.56"), 4/06/01(0.94")
11/27/1997	1.50	2.34	1.44	0.88	1.00	0.66	4.44	11.37	11.95	
09/12/1996	1.51	2.71	4.41				7.12	11.45	12.05	Four rains, 9/12/96(0.39"), 8/13/96(0.81"), 8/14/99(0.23"), 8/15/99(0.08")
06/11/1998	1.57	1.24	8.63	1.17	2.80	4.60	14.47	11.95	12.60	6/11+6/12
02/08/2001	1.57	6.51		1.01	2.81	9.97	16.48	11.95	12.60	Two rain events, 2/08/01(0.41"), 2/09/01(1.16")
07/23/1997	1.58	0.04	7.44				7.48	12.03	12.69	
02/24/2001	1.70	7.35	3.71	1.02	3.74	10.97	22.03	13.02	13.79	
02/24/2001	1.70	3.50	3.71	1.02	3.00	10.97	18.18	13.02	13.79	
08/04/1998	1.83	6.26	0.47	0.08	1.80	9.53	16.26	14.09	14.98	
03/08/1998	1.88	3.27	5.21	0.70	1.00	1.66	10.14	14.50	15.44	Two rain events, 03/08/98(1.08"), 03/09/98(0.80")
04/19/2000	1.90	4.91	0.56	0.15	2.44	10.25	15.72	14.67	15.62	
11/06/1996	1.97	10.28	5.70				15.98	15.25	16.26	Four rains, 11/07/96(0.39"), 11/08/96(0.96"), 11/9/96(0.25"), 11/10/96(0.40")
07/01/1999	1.99	0.91	2.78	0.61	2.83	7.70	11.39	15.41	16.45	
08/16/1997	2.05	0.85	12.22				13.07	15.91	17.00	Two rain events, 8/16/97(1.40"), 8/17/97(0.65")
07/03/1998	2.05	0.00	6.67	1.16	2.97	4.65	11.32	15.91	17.00	
10/17/1996	2.06	2.37	11.39				13.76	15.99	17.09	
06/24/2000	2.07	1.77	3.19	1.64	3.74	7.53	12.49	16.07	17.18	
06/30/1997	2.07	1.14	10.36				11.50	16.07	17.18	
02/20/1997	2.44	5.11	15.26				20.37	19.12	20.58	Four rain events, 2/20/97(0.82"), 2/21/97(1.46"), 2/22/97(0.14"). 2/23/97(0.02")
07/07/2001	2.61	3.77	3.95	1.26	3.87	9.64	17.36	20.52	22.13	
04/22/1999	2.68	2.60	6.36	0.20	3.06	9.97	18.93	21.10	22.78	
01/03/1998	2.77	15.46	14.62	0.89	1.00	0.61	30.68	21.84	23.60	Six rain events, 01/03/98(0.34"), 01/04/98(0.61"), 01/05/98(0.73"), 01/06/98(0.1
07/18/1996	5.76	6.00	52.99				58.99	46.49	51.02	

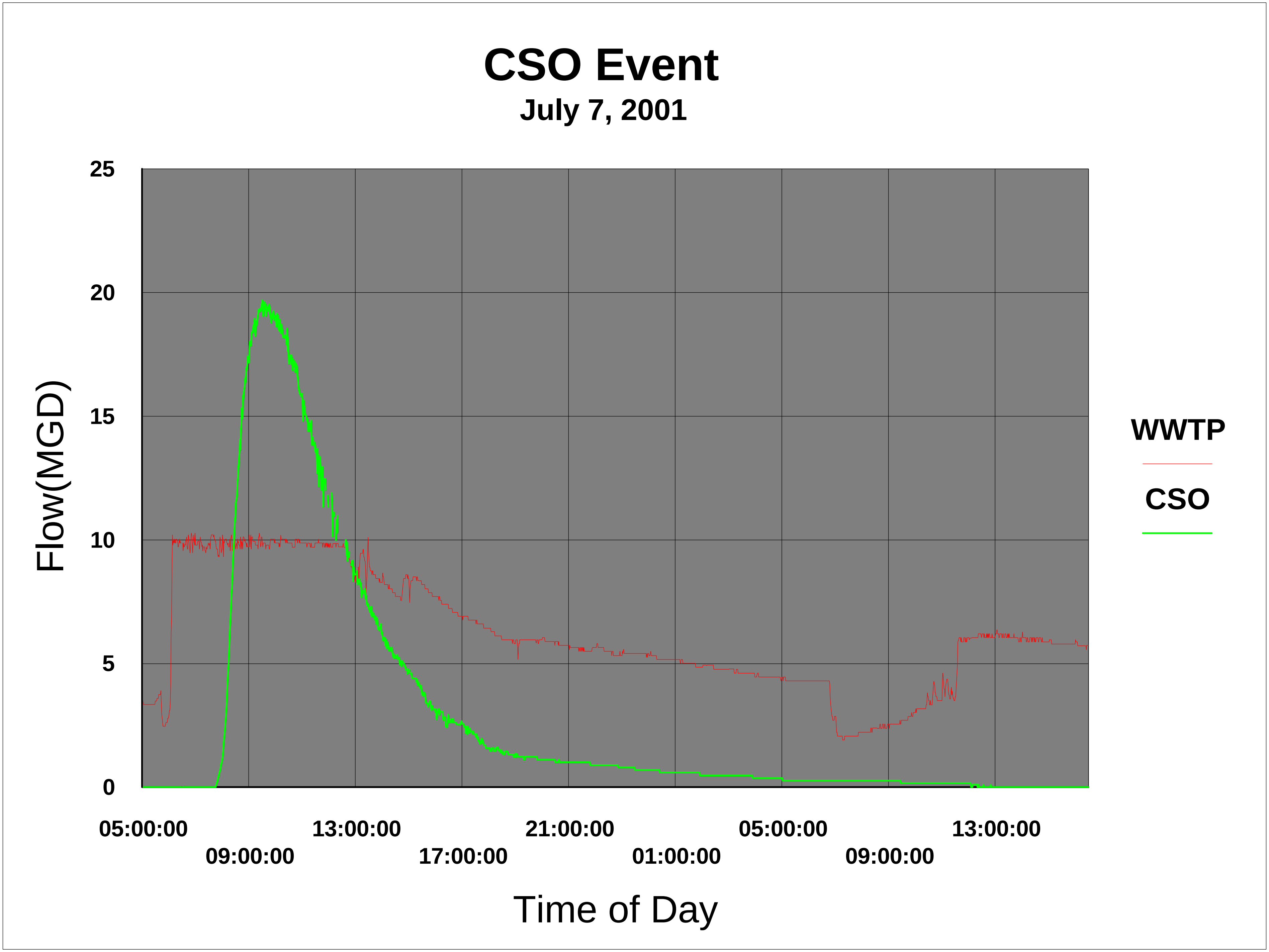
Appendix C - CSO and WWTP Event Flow Charts


CSO Event
April 20, 2000
12
10
8
6
4
2
0
Flow(MGD)
03:30
07:30
11:30
15:30
19:30
23:30
03:30
07:30
11:30
Time of Day
WWTP
CSO


CSO Event
June 24, 2000
20
15
10
5
0
Flow(MGD)
17:00:00
21:00:00
01:00:00
05:00:00
09:00:00
13:00:00
17:00:00
21:00:00
01:00:00
05:00:00
09:00:00
13:00:00
17:00:00
21:00:00
01:00:00
05:00:00
09:00:00
13:00:00
Time of Day
WWTP
CSO


CSO Event
September 11, 2000
30
25
20
15
10
5
0
Flow(MGD)
16:00:00
20:00:00
00:00:00
04:00:00
08:00:00
12:00:00
16:00:00
20:00:00
00:00:00
04:00:00
Time of Day
WWTP
CSO


CSO Event
February 24, 2001
Flow(MGD)
15
10
5
0
08:00:00
12:00:00
16:00:00
20:00:00
00:00:00
04:00:00
08:00:00
12:00:00
16:00:00
20:00:00
00:00:00
Time of Day
WWTP
CSO


CSO Event
July 7, 2001
Flow(MGD)
25
20
15
10
5
0
05:00:00
09:00:00
13:00:00
17:00:00
21:00:00
01:00:00
05:00:00
09:00:00
13:00:00
Time of Day
WWTP
CSO

Appendix D - CSO and WWTP Water Quality

Stream Reach and Characterization Evaluation Report - Summary

LaPorte WWTP

Event	Date	Rainfall (inch)	CSO Flow (mg)	Duration (days)	Exceedance of Daily or Weekly NPDES(Outfall 001) Limits*						
					Pb (mg/l)	CN (mg/l)	TSS (mg/l)	NH3 (mg/l)	E. Coliform (mg/l)	Dissolved Oxygen (mg/l)	pH (mg/l)
1	04/20/2000	0.66+1.24 = 1.90	1.90	1.00				1(comp)	10 of 10	3 of 3	
2	06/24/2000	2.07+0.40 = 2.47	3.98	2.20			1(comp)		10 of 10	6 of 6	
3	09/12/2000	2.35+1.00 = 3.35	5.73	0.60			5 of 8	8 of 8	8 of 8	8 of 8	
4	02/24/2001	1.70	3.71	1.22	4 of 4	2 of 4	8 of 8	3 of 8			3 of 8
5	07/07/2001	2.61	3.95	1.34	3 of 4		8 of 8	3 of 8	8 of 8	8 of 8	

* Exceedances are given in the form (# of exceedances) of (#of samples)
Note that dilution by the WWTP flow was not considered in the above analysis.

CSO Overflow sampling Results

City of LaPorte WWTP

Date	Start Time		Parameters (mg/l)	Composite Results (mg/l)	Start Time + minutes 15m	30m	45m	60m	75m	90m	105m	120m	150m	End Time 180m	Limit	Notes:
04/20/2000	01:30 PM		Cd	<0.0005											daily max 0.005 mg/l	
	3 Hr Composite		Pb	<0.005											daily max 0.02 mg/l	
			Ni	<0.010											daily max 0.16 mg/l	
			Zn	0.031											daily max 0.50 mg/l	
			Cu	<0.010											daily max 0.055 mg/l	
			Cr	<0.010											daily max 0.94 mg/l	
			CN	NA											daily max 0.009 mg/l	
		CBOD 3HR Comp		7.300											wkl avg 30/40 mg/l*	
		TSS 3HR Comp		27.500											wkl avg 36/45 mg/l*	
		NH3 3HR Comp		2.880											wkl avg 2.4/2.7 mg/l*	
			Coliform		TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	dly max 235 col/100ml	TNTC = >200,000
			D.O.			3.3			3.6			3.7			dly min 6.0 mg/l	
			pH											6.985	6.0 / 9.0 SU min/max	

* Summer / winter limits

CSO Overflow sampling Results

City of LaPorte WWTP

Date	Start Time		Parameters (mg/l)	Composite Results (mg/l)	Start Time + minutes 15m	30m	45m	60m	75m	90m	105m	120m	150m	End Time 180m	Limit	Notes:
06/24/2000	10:30 PM		Cd	<0.0005											daily max 0.005 mg/l	
	3 Hr Composite		Pb	0.01											daily max 0.02 mg/l	
			Ni	<0.010											daily max 0.16 mg/l	
			Zn	0.028											daily max 0.50 mg/l	
			Cu	0.017											daily max 0.055 mg/l	
			Cr	<0.010											daily max 0.94 mg/l	
			CN	<0.005											daily max 0.009 mg/l	
		CBOD 3HR Comp		11											wkl avg 30/40 mg/l*	
		TSS 3HR Comp		38.5											wkl avg 36/45 mg/l*	
		NH3 3HR Comp		2.37											wkl avg 2.4/2.7 mg/l*	
			Coliform		30850	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	dly max 235 col/100ml	TNTC = >200,000
			D.O.		2.6		2	2		1.9		1.8	1.8	1.8	dly min 6.0 mg/l	
			pH		7.2		7.14	7.3		7.25		7.22	6.92	6.72	6.0 / 9.0 SU min/max	

CSO Overflow sampling Results

City of LaPorte WWTP

		Parameters	Start Time + minutes									End Time		
Date	Start Time	(mg/l)	15m	30m	45m	60m	75m	90m	105m	120m	150m	180m	Limit	Notes:
09/12/2000	12:30 AM	Cd	<0.0005		<0.0005		<0.0005		<0.0005				daily max 0.005 mg/l	
		Pb	0.009		0.010		0.015		0.018				daily max 0.02 mg/l	
		Ni	<0.010		0.011		0.014		<0.010				daily max 0.16 mg/l	
		Zn	0.051		0.063		0.084		0.104				daily max 0.50 mg/l	
		Cu	0.030		0.042		0.044		0.044				daily max 0.055 mg/l	
		Cr	0.011		0.015		0.018		0.024				daily max 0.94 mg/l	
		CN	<0.005		<0.005		<0.005		<0.005				daily max 0.009 mg/l	
		CBOD	16.5	18	16	17	15	14	14.5	14			wkl avg 30/40 mg/l*	
		TSS	31	29	36	59	47	58	54	52			wkl avg 36/45 mg/l*	
		NH3	6.15	5.51	5.48	4.35	4.23	4.14	4.23	4.21			wkl avg 2.4/2.7 mg/l*	
		Coliform	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC			dly max 235 col/100ml	TNTC = >200,000
		D.O.	1.9	1.7	1.8	1.8	1.9	1.8	1.8	1.8			dly min 6.0 mg/l	
		pH	7.17	7.16	7.29	7.22	7.26	7.18	7.27	7.16			6.0 / 9.0 SU min/max	

CSO Overflow sampling Results

City of LaPorte WWTP

Date	Start Time	Parameters (mg/l)	Start Time + minutes 15m	30m	45m	60m	75m	90m	105m	120m	150m	End Time 180m	Limit	Notes:
02/24/2001	07:05 PM	Cd	<0.0005		0.0006		<0.0005		0.0005				daily max 0.005 mg/l	
		Pb	0.026		0.042		0.033		0.040				daily max 0.02 mg/l	
		Ni	<0.010		<0.010		0.014		0.012				daily max 0.16 mg/l	
		Zn	0.153		0.168		0.150		0.162				daily max 0.50 mg/l	
		Cu	0.017		0.028		0.023		0.026				daily max 0.055 mg/l	
		Cr	<0.010		<0.010		<0.010		0.018				daily max 0.94 mg/l	
		CN	<0.005		0.010		0.008		0.010				daily max 0.009 mg/l	
		CBOD	21.5	22.0	20.7	20.0	19.0	18.7	19.0	16.0			wkl avg 30/40 mg/l*	
		TSS	150	200	198	188	170	166	184	142			wkl avg 36/45 mg/l*	
		NH3	4.22	2.06	2.15	2.06	2.76	2.45	2.13	3.15			wkl avg 2.4/2.7 mg/l*	
		Coliform											dly max 235 col/100ml	
		D.O.	8.5	10.3	10.5	10.1	9.5	9.8	10.3	8.4			dly min 6.0 mg/l	
		pH	5.92	5.22	5.28	6.1	6.78	6.79	6.89	6.84			6.0 / 9.0 SU min/max	Avg temp = 3.6°C

* Summer / winter limits

CSO Overflow sampling Results

City of LaPorte WWTP

Date	Start Time	Parameters (mg/l)	Start Time + minutes 15m	30m	45m	60m	75m	90m	105m	120m	150m	End Time 180m	Limit	Notes:
07/07/2001	07:50 AM	Cd	<0.0005		<0.0005		<0.0005		<0.0005				daily max 0.005 mg/l	
		Pb	0.018		0.023		0.028		0.026				daily max 0.02 mg/l	
		Ni	<0.010		0.013		<0.010		<0.010				daily max 0.16 mg/l	
		Zn	0.074		0.062		0.088		0.077				daily max 0.50 mg/l	
		Cu	0.021		0.027		0.041		0.042				daily max 0.055 mg/l	
		Cr	<0.010		<0.010		<0.010		<0.010				daily max 0.94 mg/l	
		CN	<0.005		<0.005		<0.005		<0.005				daily max 0.009 mg/l	
		CBOD	9	11.5	8.5	14.0	12	11.5	12.5	10.5			wkl avg 30/40 mg/l*	
		TSS	98	47	73	69	73	70	79	67			wkl avg 36/45 mg/l*	
		NH3	6.32	10.51	4.08	3.24	3.46	3.76	3.73	3.17			wkl avg 2.4/2.7 mg/l*	
		Coliform	3600	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC	TNTC			dly max 235 col/100ml	TNTC = >200,000
		D.O.	5.4	3.6	4.6	5.0	4.6	4.4	4.6	5.0			dly min 6.0 mg/l	
		pH	6.7	6.11	6.5	6.52	6.58	6.94	6.85	6.89			6.0 / 9.0 SU min/max	

* Summer / winter limits

MONTHLY REPORT OF OPERATION

Trickling Filter Wastewater Treatment Plant

Date: Apr-00

LaPorte Wastewater Treatment Plant
2101 Boyd Boulevard
LaPorte IN, 46350

Permit # IN0025577
Certified Operator : Jerry P Jackson
Certification Number : 11496

Final Effluent

Day of the Month	Day of the Week	pH		CBOD in mg/L	CBOD weekly av in mg/L	CBOD in lbs/Day	CBOD weekly av in lbs/Day	TSS in mg/L	TSS weekly av in mg/L	TSS in lbs/Day	TSS weekly av in lbs/Day	NH3-N in mg/L	NH3-N weekly av in mg/L	NH3-N in lbs/Day	NH3-N weekly av in lbs/Day	Dissolved Oxygen in mg/L	Aerators run in hours	Chlorine Tank Residual in mg/L	Escherichia Coliform (Colonies /100mL)	Effluent Chlorine Residual in mg/L
1	Sat	7.44		< 2	3	25	84	5	5	127	134	0.36	0.29	9	8	10.3		1.72	4	< 0.006
2	Sun	7.31		3		78		11		277		0.39		10		8.9		1.67	0	< 0.006
3	Mon	7.27		3		83		4		101		0.46		12		9.3		1.56	3	< 0.006
4	Tue	7.47		2		58		4		102		0.42		10		9.8		1.73	1	< 0.006
5	Wed	7.70		4		87		9		200		0.29		6		10.1		1.55	2	< 0.006
6	Thu	7.21		6		149		15		385		0.43		11		10.1		1.51	0	< 0.006
7	Fri	7.36		11		531		19		902		2.44		114		10.6		1.62	0	< 0.006
8	Sat	7.40		6	5	343	190	12	11	674	377	0.74	0.74	42	29	10.3		1.53	2	< 0.006
9	Sun	7.51		6		248		10		386		0.43		18		10.2		1.57	0	< 0.006
10	Mon	7.50		5		134		6		168		0.65		18		11.2		1.46	0	< 0.006
11	Tue	7.31		4		90		10		224		0.42		10		10.4		1.52	0	< 0.006
12	Wed	7.61		5		106		8		177		0.38		8		10.3		1.91	0	< 0.006
13	Thu	7.28		5		150		22		667		0.44		13		9.9		1.70	0	< 0.006
14	Fri	7.33		4		110		10		276		0.30		8		10.3		1.56	0	< 0.006
15	Sat	7.29		3	4	67	129	15	11	370	324	<0.20	0.39	2	11	9.6		1.52	0	< 0.006
16	Sun	7.45		4		89		13		310		0.35		8		9.3		1.66	0	< 0.006
17	Mon	7.39		4		162		18		690		0.48		19		9.6		1.57	0	< 0.006
18	Tue	7.34		3		101		23		669		0.22		7		10.1		1.57	4	< 0.006
19	Wed	7.46		6		227		26		1056		0.81		33		9.5		1.70	3	< 0.006
20	Thu	6.98		6		392		23		1605		0.32		23		10.0		1.56	4	< 0.006
21	Fri	7.14		3		148		9		464		0.21		11		10.7		1.47	158	< 0.006
22	Sat	7.46		4	4	170	184	11	17	487	755	<0.20	0.36	4	15	10.0		1.53	2	< 0.006
23	Sun	7.65		4		206		10		469		0.67		31		9.9		1.68	2	< 0.006
24	Mon	7.22		4		192		12		513		0.32		14		10.0		1.44	55	< 0.006
25	Tue	7.45		4		153		11		435		0.39		16		10.0		2.01	2	< 0.006
26	Wed	7.44		4		107		8		237		<0.20		3		10.0		1.40	5	< 0.006
27	Thu	7.76		3		90		11		292		0.22		6		10.4		1.49	0	< 0.006
28	Fri	7.43		3		77		7		175		0.22		6		10.0		1.41	0	< 0.006
29	Sat	7.36		3	4	64	127	10	10	230	336	0.40	0.33	9	12	10.3		1.43	1	< 0.006
30	Sun	7.48		4		90		13		305		<0.20		2		10.4		1.52	0	< 0.006
AVERAGE		7.40		4		151		12		432		0.44		16		10.1		1.59	2	< 0.006
MAXIMUM		7.76		11	5	531	190	26	17	1605	755	2.44	0.74	114	29	11.2		2.01	158	< 0.006
MINIMUM		6.98		<2		25		4		101		<0.20		2		8.9		1.40	0	< 0.006
# OF DATA		30		30		30		30		30		30		30		30		30	30	30
TOTAL		222		126		4527		362		12972		13		485		301.5		47.57	248	< 0.006

MONTHLY REPORT OF OPERATION

Trickling Filter Wastewater Treatment Plant

Date: Apr-00

Permit # IN0025577
Certified Operator : Jerry P Jackson
Certification Number : 11496

Total lbs Volatile Solids to Digester	4,169
Overall Percent Removal of Volatile Solids	56.5%
Equivalent Population Treated in (lbs Raw CBOD per Day / 0.17)	19,676
Rotary Filter Hydraulic Loading Rate (Gallon / Day / Sq Ft)	470
Fixed Bed Filter Hydraulic Loading Rate (Gallon / Day / Sq Ft)	78
Biotower Filter Hydraulic Loading Rate (Gallons / Day / Sq Ft)	1,465
Rotary Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day)	26
Fixed Bed Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day)	4
Biotower Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day)	3

Monthly Removal Summary

Percent Removal	CBOD	TSS	AMMONIA
Primary Treatment	21%	41%	-4%
Secondary Treatment	82%	73%	56%
Tertiary Treatment	70%	32%	95%
Overall Treatment	96%	89%	98%

Detention Time (Hours)	Maximum	Minimum	Average
Primary Settling Tank	4.6	1.4	3.0
Secondary Settling Tank	3.4	1.0	2.2
Final Settling Tank	10.6	3.3	7.0
Total Plant Retention Time	18.5	5.8	12.2

Surface Flow Rate Gallons per sq ft per Day	Maximum	Minimum	Average
Primary Settling Tank	1069	332	505
Secondary Settling Tank	1412	439	666
Final Settling Tank	720	224	339

Weir OverFlow Rate 1000 Gal per ft per Day	Maximum	Minimum	Average
Primary Settling Tank	21	6	10
Secondary Settling Tank	17	5	8
Final Settling Tank	16	5	8

TREATMENT EQUIPMENT	Total available	Number in service
PRIMARY CLARIFIER TANKS	4	4
SECONDARY CLARIFIER TANKS	2	2
FINAL CLARIFIER TANKS	2	2
ROTARY FILTER	1	1
FIXED BED FILTER	1	1
BIOTOWERS	2	2

Monthly Comments Concerning Plant Operation:

April 3rd - Fixed Bed / Southern half back in service

April 6th - Opened Biotower vents (All vents opened 100%) for summer

April 8th - On emergency power for 1 hour

Tested emergency backup generator on 6th, 11th, and 25th.

MONTHLY REPORT OF OPERATION

Trickling Filter Wastewater Treatment Plant

Date: Jun-00

LaPorte Wastewater Treatment Plant
2101 Boyd Boulevard
LaPorte IN, 46350

Permit # IN0025577
Certified Operator : Jerry P Jackson
Certification Number : 11496

Final Effluent

Day of the Month	Day of the Week	pH		CBOD in mg/L	CBOD weekly av in mg/L	CBOD in lbs/Day	CBOD weekly av in lbs/Day	TSS in mg/L	TSS weekly av in mg/L	TSS in lbs/Day	TSS weekly av in lbs/Day	NH3-N in mg/L	NH3-N weekly av in mg/L	NH3-N in lbs/Day	NH3-N weekly av in lbs/Day	Dissolved Oxygen in mg/L	Aerators run in hours	Chlorine Tank Residual in mg/L	Escherichia Coliform (Colonies /100mL)	Effluent Chlorine Residual in mg/L
1	Thu	7.74		4		149		7		308		<0.20		4		8.3		1.52	2	< 0.006
2	Fri	7.34		9		265		10		285		1.81		52		9.2		1.67	3	< 0.006
3	Sat	7.68		3	5	59	182	7	8	166	296	<0.20	0.37	2	12	9.2		1.61	3	< 0.006
4	Sun	7.96		4		86		3		68		<0.20		2		9.3		1.58	1	< 0.006
5	Mon	7.23		5		313		10		580		<0.20		6		10.1		1.33	22	< 0.006
6	Tue	7.44		3		139		7		306		<0.20		4		9.7		1.78	17	< 0.006
7	Wed	7.40		3		112		4		177		0.33		14		9.3		1.73	20	< 0.006
8	Thu	7.69		3		117		10		419		0.21		9		8.9		1.69	8	< 0.006
9	Fri	7.39		3		86		5		134		0.36		11		8.6		1.47	0	< 0.006
10	Sat	7.39		3	3	77	133	9	7	204	270	<0.20	0.19	2	7	8.7		1.37	0	< 0.006
11	Sun	7.38		5		157		5		141		<0.20		3		8.9		1.32	0	< 0.006
12	Mon	7.34		5		283		11		549		<0.20		5		9.2		1.47	16	< 0.006
13	Tue	7.09		5		280		14		771		<0.20		6		9.3		1.50	38	< 0.006
14	Wed	7.13		5		241		12		616		0.26		13		8.6		1.37	12	< 0.006
15	Thu	7.38		3		119		8		330		<0.20		4		9.1		1.66	8	< 0.006
16	Fri	7.22		4		143		14		535		<0.20		4		8.9		1.73	9	< 0.006
17	Sat	7.29		4	4	175	200	16	11	638	512	<0.20	0.12	4	6	9.3		1.32	20	< 0.006
18	Sun	7.63		5		183		16		580		<0.20		4		9.1		1.54	0	< 0.006
19	Mon	7.48		5		142		21		582		0.22		6		9.1		1.73	5	< 0.006
20	Tue	7.62		7		260		13		458		2.16		79		8.6		1.64	10	< 0.006
21	Wed	6.63		9		487		19		996		1.32		69		8.9		1.62	47	< 0.006
22	Thu	7.74		6		256		18		799		<0.20		4		9.6		1.54	68	< 0.006
23	Fri	7.37		6		232		20		822		<0.20		4		8.6		1.56	22	< 0.006
24	Sat	7.41		5	6	276	262	19	18	989	747	<0.20	0.59	5	25	8.2		1.82	35	< 0.006
25	Sun	6.96		5		254		9		432		<0.20		5		8.5		1.37	5	< 0.006
26	Mon	7.07		5		264		10		464		<0.20		5		9.5		1.02	69	< 0.006
27	Tue	7.53		4		139		16		626		<0.20		4		9.1		1.45	74	< 0.006
28	Wed	7.48		6		261		15		663		0.62		27		8.1		1.51	58	< 0.006
29	Thu	7.52		6		282		17		750		0.84		37		9.0		1.56	89	< 0.006
30	Fri	7.46		7		300		16		675		0.29		12		9.3		1.37	10	< 0.006
AVERAGE		7.40		5		205		12		502		0.34		14		9.0		1.53	10	< 0.006
MAXIMUM		7.96		9	6	487	262	21	18	996	747	2.16	0.59	79	25	10.1		1.82	89	< 0.006
MINIMUM		6.63		3		59		3		68		<0.20		2		8.1		1.02	0	< 0.006
# OF DATA		30		30		30		30		30		30		30		30		30	30	30
TOTAL		222		146		6140		355		15064		10		409		270.2		45.85	671	< 0.006

MONTHLY REPORT OF OPERATION

Trickling Filter Wastewater Treatment Plant

Date: 36678

Permit # IN0025577

Certified Operator : Jerry P Jackson

Certification Number : 11496

Total lbs Volatile Solids to Digester: 3,467

Overall Percent Removal of Volatile Solids: 47.1%

Equivalent Population Treated in (lbs Raw CBOD per Day / 0.17): 19,051

Rotary Filter Hydraulic Loading Rate (Gallon / Day / Sq Ft): 515

Fixed Bed Filter Hydraulic Loading Rate (Gallon / Day / Sq Ft): 91

Biotower Filter Hydraulic Loading Rate (Gallons / Day / Sq Ft): 1,497

Rotary Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day): 24

Fixed Bed Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day): 4

Biotower Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day): 3

Monthly Removal Summary

Percent Removal :	CBOD	TSS	AMMONIA
Primary Treatment :	21%	36%	-11%
Secondary Treatment :	83%	64%	62%
Tertiary Treatment :	54%	42%	94%
Overall Treatment :	94%	87%	97%

TREATMENT EQUIPMENT	Total available	Number in service
PRIMARY CLARIFIER TANKS	4	4
SECONDARY CLARIFIER TANKS	2	2
FINAL CLARIFIER TANKS	2	2
ROTARY FILTER	1	1
FIXED BED FILTER	1	1
BIOTOWERS	2	2

Detention Time (Hours)	Maximum	Minimum	Average
Primary Settling Tank	4.3	1.8	2.5
Secondary Settling Tank	3.2	1.3	1.8
Final Settling Tank	9.9	4.0	5.7
Total Plant Retention Time	17.3	7.1	10.0

Surface Flow Rate Gallons per sq ft per Day	Maximum	Minimum	Average
Primary Settling Tank	870	356	616
Secondary Settling Tank	1148	470	813
Final Settling Tank	585	239	415

Weir OverFlow Rate 1000 Gal per ft per Day	Maximum	Minimum	Average
Primary Settling Tank	17	7	12
Secondary Settling Tank	14	6	10
Final Settling Tank	13	5	9

Monthly Comments Concerning Plant Operation:

June 20th - Lightening damage to Digester Controls system. System no longer reporting digester temperatures and flows to the SCADA computer

June 20th - Primary Clarifier #2 out of service for 8 hours for repairs

June 21st - Final Clarifier #2 out of service for 8 hours for repairs

June 2nd, 6th, 8th, and 13th - Test Generator Successfully

MONTHLY REPORT OF OPERATION

Trickling Filter Wastewater Treatment Plant

Date: Sep-00

LaPorte Wastewater Treatment Plant
2101 Boyd Boulevard
LaPorte IN, 46350

Permit # IN0025577
Certified Operator : Jerry P Jackson
Certification Number : 11496

Final Effluent

Day of the Month	Day of the Week	pH		CBOD in mg/L	CBOD weekly av in mg/L	CBOD in lbs/Day	CBOD weekly av in lbs/Day	TSS in mg/L	TSS weekly av in mg/L	TSS in lbs/Day	TSS weekly av in lbs/Day	NH3-N in mg/L	NH3-N weekly av in mg/L	NH3-N in lbs/Day	NH3-N weekly av in lbs/Day	Dissolved Oxygen in mg/L	Aerators run in hours	Chlorine Tank Residual in mg/L	Escherichia Coliform (Colonies /100mL)	Effluent Chlorine Residual in mg/L
1	Fri	7.42		3		66		1		26		<0.20		3		8.5		1.57	5	< 0.006
2	Sat	7.56		2	3	53	84	5	6	120	152	<0.20	0.16	2	4	8.1		1.28	8	< 0.006
3	Sun	7.67		5		113		3		65		<0.20		2		8.1		1.58	5	< 0.006
4	Mon	7.57		3		64		2		47		<0.20		2		8.7		1.00	19	< 0.006
5	Tue	7.68		3		65		2		52		<0.20		2		8.9		1.36	10	< 0.006
6	Wed	7.88		3		88		5		129		<0.20		3		8.4		1.54	18	< 0.006
7	Thu	7.51		4		97		7		176		0.21		5		9.0		2.21	5	< 0.006
8	Fri	7.45		3		100		9		266		<0.20		3		8.4		1.87	34	< 0.006
9	Sat	7.44		3	3	71	85	8	5	196	133	<0.20	0.12	2	3	8.1		1.00	11	< 0.006
10	Sun	7.51		< 2		24		3		67		<0.20		2		8.2		2.01	24	< 0.006
11	Mon	7.61		5		198		8		324		0.49		20		8.2		2.01	19	< 0.006
12	Tue	6.95		4		242		12		729		0.24		15		8.7		1.44	29	< 0.006
13	Wed	7.17		12		532		12		546		1.21		55		8.6		1.56	21	< 0.006
14	Thu	7.39		4		209		8		411		0.24		12		9.8		1.49	68	< 0.006
15	Fri	7.27		4		211		5		231		0.46		24		9.4		1.29	60	< 0.006
16	Sat	7.59		3	5	124	220	6	8	257	366	0.26	0.43	11	20	10.0		1.51	6	< 0.006
17	Sun	7.41		3		128		4		141		0.28		10		9.7		1.27	14	< 0.006
18	Mon	7.66		4		87		6		136		0.70		17		9.2		2.20	7	< 0.006
19	Tue	7.77		2		45		6		130		0.34		8		8.5		2.10	19	< 0.006
20	Wed	7.46		6		204		9		294		0.85		29		8.3		1.62	13	< 0.006
21	Thu	7.24		7		185		7		174		0.92		25		9.2		1.35	4	< 0.006
22	Fri	7.45		3		78		4		100		0.37		9		9.8		2.21	19	< 0.006
23	Sat	7.41		6	4	235	137	8	6	342	188	2.40	0.84	103	29	9.2		1.67	21	< 0.006
24	Sun	7.33		4		108		5		135		0.43		12		9.7		1.29	0	< 0.006
25	Mon	7.61		4		91		2		38		0.41		10		9.5		2.20	7	< 0.006
26	Tue	7.58		3		71		1		32		1.39		36		9.3		1.38	16	< 0.006
27	Wed	7.61		4		100		1		24		0.23		6		9.2		1.37	12	< 0.006
28	Thu	7.78		4		87		3		81		0.31		8		10.3		1.30	6	< 0.006
29	Fri	7.49		3		68		5		122		0.26		6		9.3		1.38	13	< 0.006
30	Sat	7.54		2	3	58	83	6	3	151	83	<0.20	0.45	3	11	9.0		1.43	9	< 0.006
AVERAGE		7.50		4		127		5		185		0.43		15		9.0		1.58	12	< 0.006
MAXIMUM		7.88		12	5	532	220	12	8	729	366	2.40	0.84	103	29	10.3		2.21	68	< 0.006
MINIMUM		6.95		<2		24		1		24		<0.20		2		8.1		1.00	0	< 0.006
# OF DATA		30		30		30		30		30		30		30		30		30	30	30
TOTAL		225		115		3803		160		5542		13		445		269.3		47.49	502	< 0.006

MONTHLY REPORT OF OPERATION

Trickling Filter Wastewater Treatment Plant

Date: Sep-00

Permit # IN0025577

Certified Operator : Jerry P Jackson

Certification Number : 11496

Total lbs Volatile Solids to Digester: 3,551

Overall Percent Removal of Volatile Solids: 35.5%

Equivalent Population Treated in (lbs Raw CBOD per Day / 0.17): 20,992

Rotary Filter Hydraulic Loading Rate (Gallon / Day / Sq Ft): 482

Fixed Bed Filter Hydraulic Loading Rate (Gallon / Day / Sq Ft): 93

Biotower Filter Hydraulic Loading Rate (Gallons / Day / Sq Ft): 1,445

Rotary Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day): 21

Fixed Bed Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day): 4

Biotower Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day): 3

Monthly Removal Summary

Percent Removal :	CBOD	TSS	AMMONIA
Primary Treatment :	35%	46%	-8%
Secondary Treatment :	82%	74%	64%
Tertiary Treatment :	72%	67%	94%
Overall Treatment :	97%	95%	98%

Detention Time (Hours)	Maximum	Minimum	Average
Primary Settling Tank	4.5	1.6	3.3
Secondary Settling Tank	3.3	1.2	2.4
Final Settling Tank	10.4	3.8	7.5
Total Plant Retention Time	18.2	6.6	13.2

Surface Flow Rate Gallons per sq ft per Day	Maximum	Minimum	Average
Primary Settling Tank	930	338	466
Secondary Settling Tank	1228	446	615
Final Settling Tank	626	227	314

Weir OverFlow Rate 1000 Gal per ft per Day	Maximum	Minimum	Average
Primary Settling Tank	18	7	9
Secondary Settling Tank	15	5	7
Final Settling Tank	14	5	7

TREATMENT EQUIPMENT	Total available	Number in service
PRIMARY CLARIFIER TANKS	4	4
SECONDARY CLARIFIER TANKS	2	2
FINAL CLARIFIER TANKS	2	2
ROTARY FILTER	1	1
FIXED BED FILTER	1	1
BIOTOWERS	2	2

Monthly Comments Concerning Plant Operation:

5th, 12th, 21th, 26th - Test Run Generator

MONTHLY REPORT OF OPERATION

Trickling Filter Wastewater Treatment Plant

Date: Feb-01

LaPorte Wastewater Treatment Plant
2101 Boyd Boulevard
LaPorte IN, 46350

Permit # IN0025577
Certified Operator : Jerry P Jackson
Certification Number : 11496

Final Effluent

Day of the Month	Day of the Week	Effluent Flow in MGal/Day	pH	CBOD in mg/L	CBOD weekly av in mg/L	CBOD in lbs/Day	CBOD weekly av in lbs/Day	TSS in mg/L	TSS weekly av in mg/L	TSS in lbs/Day	TSS weekly av in lbs/Day	NH3-N in mg/L	NH3-N weekly av in mg/L	NH3-N in lbs/Day	NH3-N weekly av in lbs/Day	Dissolved Oxygen in mg/L	Aerators run in hours	Chlorine Tank Residual in mg/L	Escherichia Coliform (Colonies /100mL)	Effluent Chlorine Residual in mg/L
1	Thu	3.6	7.25	4		126		2		56		1.20		39		12.0				
2	Fri	3.4	7.46	5		144		3		92		1.31		40		11.2				
3	Sat	2.8	7.73	3	5	84	186	4	5	87	190	0.90	1.35	22	48	13.0				
4	Sun	2.8	7.67	2		61		1		26		0.27		7		11.6				
5	Mon	2.7	7.67	4		87		4		87		0.41		10		11.6				
6	Tue	4.1	7.43	3		102		3		82		1.34		44		11.5				
7	Wed	3.5	7.82	4		119		4		110		1.62		51		11.5				
8	Thu	4.7	8.09	4		147		5		189		0.99		42		10.4				
9	Fri	8.4	7.46	7		535		10		743		0.76		56		10.2				
10	Sat	5.4	7.88	5	4	236	184	5	4	236	210	1.54	0.99	73	40	12.9				
11	Sun	4.9	7.93	7		277		7		298		1.72		73		12.4				
12	Mon	5.0	7.73	6		239		5		195		1.51		66		12.3				
13	Tue	1.5	7.45	5		232		2		64		1.22		53		10.9				
14	Wed		7.49	5		195		7		275		1.65		70		11.8				
15	Thu		7.92	4		138		3		118		1.26		46		11.9				
16	Fri		7.83	3		89		2		43		0.74		21		10.4				
17	Sat		7.78	3	5	106	182	2	4	50	149	0.50	1.23	16	49	12.0				
18	Sun		7.66	4		127		4		135		0.39		12		12.4				
19	Mon		8.00	4		97		5		115		0.39		10		12.4				
20	Tue		7.73	3		67		1		23		0.35		8		11.8				
21	Wed	1.2	8.14	4		86		3		71		0.23		5		12.1				
22	Thu	2.7	8.08	4		84		5		114		0.31		7		12.9				
23	Fri	2.9	8.12	2		63		4		92		0.23		6		11.2				
24	Sat	6.1	8.06	5	4	297	117	11	5	578	161	0.66	0.36	36	12	11.5				
25	Sun	6.7	7.59	5		299		10		572		0.76		44		10.8				
26	Mon	5.2	7.66	7		311		6		251		1.38		63		12.5				
27	Tue	4.4	7.44	6		262		4		166		1.22		51		10.9				
28	Wed	4.9	7.65	7		294		5		195		2.59		112		10.3				
AVERAGE		3.1	7.74	4		175		4		181		0.98		39		11.7				
MAXIMUM		8.4	8.14	7	5	535	186	11	5	743	210	2.59	1.35	112	49	13.0				
MINIMUM			7.25	2		61		1		23		0.23		5		10.2				
# OF DATA		28	28	28		28		28		28		28		28		28				
TOTAL		87	217	123		4904		119		5064		27		1084		326.4				

MONTHLY REPORT OF OPERATION

Trickling Filter Wastewater Treatment Plant

Date: Feb-01

Permit # IN0025577

Certified Operator : Jerry P Jackson

Certification Number : 11496

Total lbs Volatile Solids to Digester	2,896
Overall Percent Removal of Volatile Solids	32.8%
Equivalent Population Treated in (lbs Raw CBOD per Day / 0.17)	24,091
Rotary Filter Hydraulic Loading Rate (Gallon / Day / Sq Ft)	461
Fixed Bed Filter Hydraulic Loading Rate (Gallon / Day / Sq Ft)	55
Biotower Filter Hydraulic Loading Rate (Gallons / Day / Sq Ft)	1,483
Rotary Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day)	35
Fixed Bed Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day)	4
Biotower Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day)	6

Monthly Removal Summary

Percent Removal	CBOD	TSS	AMMONIA
Primary Treatment	22%	39%	-7%
Secondary Treatment	69%	59%	28%
Tertiary Treatment	83%	86%	92%
Overall Treatment	96%	97%	94%

Detention Time (Hours)	Maximum	Minimum	Average
Primary Settling Tank	4.4	1.4	2.8
Secondary Settling Tank	3.3	1.0	2.0
Final Settling Tank	10.2	3.2	6.3
Total Plant Retention Time	17.9	5.5	11.1

Surface Flow Rate Gallons per sq ft per Day	Maximum	Minimum	Average
Primary Settling Tank	1113	344	553
Secondary Settling Tank	1469	454	731
Final Settling Tank	749	231	372

Weir OverFlow Rate 1000 Gal per ft per Day	Maximum	Minimum	Average
Primary Settling Tank	22	7	11
Secondary Settling Tank	18	5	9
Final Settling Tank	17	5	8

TREATMENT EQUIPMENT	Total available	Number in service
PRIMARY CLARIFIER TANKS	4	4
SECONDARY CLARIFIER TANKS	2	2
FINAL CLARIFIER TANKS	2	2
ROTARY FILTER	1	1
FIXED BED FILTER	1	1
BIOTOWERS	2	2

Monthly Comments Concerning Plant Operation:

Tested emergency power generator on 23rd and 28th.

Feb 2nd - Instrument Panel #3 with new Allen Bradley Controls placed on-line.

Feb 14th thru 20th - No final effluent flows. Replaced final effluent weir plate. Existing plate was extremely corroded.

MONTHLY REPORT OF OPERATION

Trickling Filter Wastewater Treatment Plant

Date: Jul-01

LaPorte Wastewater Treatment Plant
2101 Boyd Boulevard
LaPorte IN, 46350

Permit # IN0025577
Certified Operator : Jerry P Jackson
Certification Number : 11496

Final Effluent

Day of the Month	Day of the Week	Effluent Flow in MGal/Day	pH	CBOD in mg/L	CBOD weekly av in mg/L	CBOD in lbs/Day	CBOD weekly av in lbs/Day	TSS in mg/L	TSS weekly av in mg/L	TSS in lbs/Day	TSS weekly av in lbs/Day	NH3-N in mg/L	NH3-N weekly av in mg/L	NH3-N in lbs/Day	NH3-N weekly av in lbs/Day	Dissolved Oxygen in mg/L	Aerators run in hours	Chlorine Tank Residual in mg/L	Escherichia Coliform (Colonies /100mL)	Effluent Chlorine Residual in mg/L
1	Sun	2.5	7.47	4		97		9		196		0.39		9		8.4		2.00	2	< 0.006
2	Mon	3.1	7.71	5		148		6		174		0.46		13		9.2		2.01	4	< 0.006
3	Tue	3.6	7.54	6		204		14		446		0.54		17		8.9		2.21	10	< 0.006
4	Wed	2.8	7.56	3		81		6		139		0.53		14		8.3		2.47	15	< 0.006
5	Thu	3.1	7.74	4		108		9		250		<0.20		3		8.8		2.40	16	< 0.006
6	Fri	2.4	7.41	3		61		9		204		0.37		8		9.2		2.57	27	< 0.006
7	Sat	6.1	7.41	7	5	368	152	21	10	1151	366	1.09	0.50	59	18	8.3		2.88	140	< 0.006
8	Sun	4.5	7.42	4		152		10		379		0.60		24		7.8		2.47	80	< 0.006
9	Mon	4.8	7.43	5		207		7		302		0.55		24		8.6		1.90	12	< 0.006
10	Tue	4.7	7.49	5		197		13		545		0.50		21		8.9		2.20	77	< 0.006
11	Wed	4.9	7.15	5		202		13		570		0.38		17		9.0		2.79	26	< 0.006
12	Thu	4.8	7.27	6		234		17		701		0.30		13		8.8		3.47	81	< 0.006
13	Fri	4.6	7.24	3		103		12		475		0.40		16		9.1		3.27	33	< 0.006
14	Sat	2.8	7.25	3	4	75	167	4	11	103	439	0.35	0.44	9	18	8.5		3.22	18	< 0.006
15	Sun	2.7	7.39	7		173		5		123		0.23		6		10.4		2.80	4	< 0.006
16	Mon	3.3	7.34	5		143		16		498		<0.20		3		10.7		2.47	33	< 0.006
17	Tue	4.0	7.30	6		203		14		499		0.65		24		8.5		2.57	26	< 0.006
18	Wed	3.7	7.13	4		143		2		66		<0.20		3		7.7		3.27	0	< 0.006
19	Thu	2.9	7.27	3		74		8		210		0.41		11		8.3		3.35	36	< 0.006
20	Fri	2.9	7.39	4		99		5		123		0.44		12		8.1		3.27	22	< 0.006
21	Sat	4.4	7.48	4	5	171	144	10	8	399	274	0.59	0.36	24	12	8.0		3.02	31	< 0.006
22	Sun	4.5	7.36	4		154		10		384		<0.20		4		7.8		3.11	41	< 0.006
23	Mon	4.9	7.41	5		198		6		242		0.40		17		7.7		3.38	144	< 0.006
24	Tue	4.9	7.31	2		88		10		452		0.40		18		7.7		3.27	56	< 0.006
25	Wed	5.1	7.37	4		180		12		518		0.52		23		8.1		3.22	146	< 0.006
26	Thu	4.6	7.20	5		201		19		770		0.80		33		8.3		2.37	88	< 0.006
27	Fri	3.5	7.42	4		115		4		131		0.47		15		8.8		3.01	6	< 0.006
28	Sat	2.7	7.32	6	4	159	156	1	9	25	361	0.20	0.41	5	17	8.5		3.27	8	< 0.006
29	Sun	2.8	7.26	3		85		3		86		0.20		5		8.3		4.50	17	< 0.006
30	Mon	2.9	7.24	3		75		5		139		<0.20		3		8.3		4.75	12	< 0.006
31	Tue	3.2	7.31	3		93		5		135		<0.20		3		8.2		4.66	0	< 0.006
AVERAGE		3.8	7.37	4		148		9		337		0.40		15		8.6		2.97	20	< 0.006
MAXIMUM		6.1	7.74	7	5	368	167	21	11	1151	439	1.09	0.50	59	18	10.7		4.75	146	< 0.006
MINIMUM		2.4	7.13	2		61		1		25		<0.20		3		7.7		1.90	0	< 0.006
# OF DATA		31	31	31		31		31		31		31		31		31		31	31	31
TOTAL		118	229	131		4590		280		10437		12		455		265.2		92.15	1211	< 0.006

MONTHLY REPORT OF OPERATION

Trickling Filter Wastewater Treatment Plant

Date: Jul-01

Permit # IN0025577
Certified Operator : Jerry P Jackson
Certification Number : 11496

Total lbs Volatile Solids to Digester	4,099
Overall Percent Removal of Volatile Solids	43.4%
Equivalent Population Treated in (lbs Raw CBOD per Day / 0.17)	26,022
Rotary Filter Hydraulic Loading Rate (Gallon / Day / Sq Ft)	465
Fixed Bed Filter Hydraulic Loading Rate (Gallon / Day / Sq Ft)	80
Biotower Filter Hydraulic Loading Rate (Gallons / Day / Sq Ft)	2,089
Rotary Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day)	27
Fixed Bed Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day)	4
Biotower Filter Organic Loading Rate (lbs CBOD / 1000 Cu Ft / Day)	5

Monthly Removal Summary

Percent Removal	CBOD	TSS	AMMONIA
Primary Treatment	37%	36%	-5%
Secondary Treatment	87%	69%	53%
Tertiary Treatment	60%	50%	95%
Overall Treatment	97%	90%	97%

Detention Time (Hours)	Maximum	Minimum	Average
Primary Settling Tank	4.5	1.9	2.9
Secondary Settling Tank	3.3	1.4	2.2
Final Settling Tank	10.4	4.3	6.8
Total Plant Retention Time	18.2	7.6	11.9

Surface Flow Rate Gallons per sq ft per Day	Maximum	Minimum	Average
Primary Settling Tank	810	339	517
Secondary Settling Tank	1069	448	683
Final Settling Tank	545	228	348

Weir OverFlow Rate 1000 Gal per ft per Day	Maximum	Minimum	Average
Primary Settling Tank	16	7	10
Secondary Settling Tank	13	5	8
Final Settling Tank	12	5	8

TREATMENT EQUIPMENT	Total available	Number in service
PRIMARY CLARIFIER TANKS	4	4
SECONDARY CLARIFIER TANKS	2	2
FINAL CLARIFIER TANKS	2	2
ROTARY FILTER	1	1
FIXED BED FILTER	1	1
BIOTOWERS	2	1

Monthly Comments Concerning Plant Operation:

July 3rd - Final sludge flow now being discharged into plant headworks after the influent flowmeter, instead of into secondary clarifiers.

July 7th - On emergency power from 6 am to 7am during the storm.

July 26th - North Biotower back in service

Tested emergency power generator on 3rd and 13th.

Certified Operator Signature:_______________________ Certification # : 11496

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO
Sample Date : 4-20-00
Sample Notes: STARTED @ 1:30pm ENDED @ 4:00pm
SAmples # 1 - 10 #1 = 1:30pm SAmple

pH 6.985 #10 **D.O.** #2 3.3 #5 3.6 #8 3.7 **NH_3-N** 2.88 **CN^-**

E. Coliform

ml of Sample	10	50	
Colony Count			

Calculation:
Colony Counts ________ + ________ + ________
ml of Sample ________ + ________ + ________
Sum of Colony Counts ______ **x 100 / Sum of ml** ______ = ______ **Colonys/100ml**

Total Suspended Solids

ml of sample	#2 100ml	#3 100ml		
Gross	24.4719	24.8628		
Tare	24.4692	24.8600		
Difference	.0627	.0028		
Solids in mg/l	27	28		27.5 AVG

CBOD5 Date Incubated: Date Removed:

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
#1		6	2	8.5	8.4	0.1		5.0 X
#2		60	20	8.0	4.7	1.3		~~6.5.0~~ ✓
#3		120	40	7.5	4.6	2.9		7.3
							RESULT	
								7.3

Source of Seed: ____________ **Lab Tech:** Dw

#	10 μl	50 μl
1	TNTC	TNTC
2	TNTC	TNTC
3	TNTC	TNTC
4	TNTC	TNTC
5	TNTC	TNTC
6	TNTC	TNTC
7	TNTC	TNTC
8	TNTC	TNTC
9	TNTC	TNTC
10	TNTC	TNTC

Committed To *Your* Success

LABORATORY TEST RESULTS

Job Number: 104716 Date: 05/15/2000

CUSTOMER: La Porte Waste Water Treatment Plant PROJECT: CSO OVERFLOW ATTN: Matthew Amor

Customer Sample ID: CSO OVERFLOW
Date Sampled......: 04/20/2000
Time Sampled......: 13:00
Sample Matrix.....: Aqueous

Laboratory Sample ID: 104716-1
Date Received.......: 05/05/2000
Time Received.......: 10:40

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	<0.010	0.010	mg/L	05/09/00	bjl
EPA 200.7	Copper (Cu)	<0.010	0.010	mg/L	05/09/00	bjl
EPA 200.7	Nickel (Ni)	<0.010	0.010	mg/L	05/09/00	bjl
EPA 200.7	Zinc (Zn)	0.031	0.010	mg/L	05/11/00	bjl
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	05/13/00	chh
EPA 239.2	Lead (Pb)	<0.005	0.005	mg/L	05/12/00	chh

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO Overflow - comp
Sample Date : 6-24/25-00
Sample Notes: ______

pH [ ] **D.O.** [ ] **NH_3-N** [ ] **CN^-** [ ]

E. Coliform

ml of Sample			
Colony Count			

Calculation:
Colony Counts ____ + ____ + ____
ml of Sample ____ + ____ + ____
Sum of Colony Counts ____ x 100 / Sum of ml ____ = ____ Colonys/100ml

Total Suspended Solids

ml of sample	#2 100ml	#3 100ml		
Gross	24.4759	24.8657		
Tare	24.4721	24.8618		
Difference	.0038	.0039		
Solids in mg/l	38	39		

CBOD5

Date Incubated: Date Removed:

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
#1		30ml	10%	8.2	7.3	0.9		9.0 X
#2		60ml	20%	7.7	5.6	2.1		10.5
#3		120ml	40%	6.9	2.3	4.6		11.5
							Ave.	
								11.0

Source of Seed: ______ **Lab Tech:** ______

WIRE #21

13 BAY BACKPLANE
power supply
SIC 04 processor

6-24-00 Bypass @ 10:07pm
START 10:30 pm
pH 7.20 DO 2.6 Very green - lotta algae

10:45 pm ✓ STILL very green

11:00 pm
pH 7.14 DO 2.0 STILL very green

11:15pm
pH 7.30 DO 2.0 STILL green - Flow over large wire now.

11:30 PM ✓ green - Flow STILL increasing

11:45pm
pH 7.25 DO 1.9 SVG - Flow INCREASING

6-25-00 12:00 AM ✓ SVG - LOTS OF BLACK CRAP IN (chunks) overflow

12:15AM
pH 7.22 DO 1.8 SVG - LARGE OVERFLOW!!!

12:45AM
pH 6.920 DO 1.8 SVG

1:45am
pH 6.717 DO 1.8 23°C

1:[illegible] AM

Cl_2 - MIN
MAX

#1	1 ml	263	≃ 26,300
	.5 ml	177	= 35,400
#2		TNTC	
		TNTC	
#3		TNTC	
		TNTC	
#4		TNTC	
		TNTC	
#5		TNTC	
		TNTC	
#6		TNTC	
		TNTC	
#7		TNTC	
		TNTC	
#8		TNTC	
		TNTC	
#9		TNTC	
		TNTC	
#10		TNTC	
		TNTC	

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LABORATORY TEST RESULTS

Job Number: 106999 Date: 07/10/2000

CUSTOMER: La Porte Waste Water Treatment Plant PROJECT: CSO OVERFLOW ATTN: Matthew Amor

Customer Sample ID: CSO OVERFLOW
Date Sampled......: 06/24/2000
Time Sampled......: 10:15
Sample Matrix.....: Aqueous

Laboratory Sample ID: 106999-1
Date Received.......: 06/28/2000
Time Received.......: 12:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SM 4500 CN	Cyanide, Total	<0.005	0.005	mg/L	06/30/00	jdb
EPA 200.7	Chromium (Cr)	<0.010	0.010	mg/L	06/29/00	bjl
EPA 200.7	Copper (Cu)	0.017	0.010	mg/L	06/29/00	bjl
EPA 200.7	Nickel (Ni)	<0.010	0.010	mg/L	06/29/00	bjl
EPA 200.7	Zinc (Zn)	0.028	0.010	mg/L	06/29/00	bjl
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	07/07/00	chh
EPA 239.2	Lead (Pb)	0.01	0.005	mg/L	06/30/00	chh

a part of

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO overflow #1
Sample Date : 9-12-00 @ 12:45AM
Sample Notes:

pH 7.17 **D.O.** 1.9 **NH_3-N** 6.15 **CN^-**

E. Coliform

ml of Sample	1	10	
Colony Count	TNTC	TNTC	

Calculation:
Colony Counts ____ + ____ + ____
ml of Sample ____ + ____ + ____
Sum of Colony Counts ____ **x 100 / Sum of ml** ____ = TNTC **Colonys/100ml**

Total Suspended Solids

ml of sample	#9 100ml			
Gross	18.2128			
Tare	18.2097			
Difference	.0031			
Solids in mg/l	31.0			

CBOD5 Date Incubated: 9-12-00 Date Removed: 9-17-00

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
		18ml	6%	7.7	6.7	1.0		~~16.7~~
		60ml	20%	7.4	4.1	3.3		16.5
								16.5

Source of Seed: ____ **Lab Tech:** JM

Blank = 8.3

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO overflow #2
Sample Date : 9-12-00 @ 1:00AM
Sample Notes:

pH 7.16 **D.O.** 1.7 **NH_3-N** 5.51 **CN^-**

E. Coliform

ml of Sample	1	10	
Colony Count	TNTC	TNTC	

Calculation:

Colony Counts ____ + ____ + ____
ml of Sample ____ + ____ + ____

Sum of Colony Counts ____ x 100 / Sum of ml ____ = TNTC Colonys/100ml

Total Suspended Solids

ml of sample	#2 100ml			
Gross	24.4738			
Tare	24.4709			
Difference	.0029			
Solids in mg/l	29.0			

CBOD5

Date Incubated: 9-12-00 Date Removed: 9-17-00

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
		18ml	6%	8.1	7.3	0.8		~~13.3~~
		60ml	20%	7.3	3.7	3.6		18.0
								18.0

Source of Seed: ________ **Lab Tech:** JM

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO overflow #3

Sample Date : 9-12-00 @ 1:15AM

Sample Notes:

pH 7.29 **D.O.** 1.8 **NH_3-N** 5.48 **CN^-**

E. Coliform

ml of Sample	1	10	
Colony Count	TNTC	TNTC	

Calculation:

Colony Counts ________ + ________ + ________

ml of Sample ________ + ________ + ________

Sum of Colony Counts ______ x 100 / Sum of ml ______ = TNTC Colonys/100ml

Total Suspended Solids

ml of sample	#3 100ml			
Gross	24.8645			
Tare	24.8609			
Difference	.0036			
Solids in mg/l	36.0			

CBOD5

Date Incubated: 9-12-00 Date Removed: 9-17-00

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
		18ml	6%	8.2	7.4	0.8		~~13.3~~
		60ml	20%	7.6	4.4	3.2		16.0
								16.0

Source of Seed: ____________ **Lab Tech:** JM

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO overflow #4
Sample Date : 9-12-00 @ 1:30AM
Sample Notes:

pH 7.22 **D.O.** 1.8 **NH_3-N** 4.35 **CN^-**

E. Coliform

ml of Sample	1	10	
Colony Count	TNTC	TNTC	

Calculation:
Colony Counts ________ + ________ + ________
ml of Sample ________ + ________ + ________
Sum of Colony Counts ______ x 100 / Sum of ml ______ = TNTC Colonys/100ml

Total Suspended Solids

ml of sample	#4 10ml			
Gross	22.0278			
Tare	22.0219			
Difference	.0059			
Solids in mg/l	59.0			

CBOD5 Date Incubated: 9-12-00 Date Removed: 9-17-00

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
		18ml	6%	8.2	7.8	0.4		~~6.7~~
		60ml	20%	7.5	4.1	3.4		17.0
								17.0

Source of Seed: ____________ **Lab Tech:** JM

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO overflow #5
Sample Date : 9-12-00 @ 1:45AM
Sample Notes:

pH 7.26 **D.O.** 1.9 **NH_3-N** 4.23 **CN^-**

E. Coliform

ml of Sample	1	10	
Colony Count	TNTC	TNTC	

Calculation:
Colony Counts ______ + ______ + ______
ml of Sample ______ + ______ + ______
Sum of Colony Counts ______ **x 100 / Sum of ml** ______ = TNTC **Colonys/100ml**

Total Suspended Solids

ml of sample	#5 100ml			
Gross	25.2768			
Tare	25.2721			
Difference	.0047			
Solids in mg/l	47.0			

CBOD5

Date Incubated: 9-12-00 Date Removed: 9-17-00

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
		18ml	6%	8.2	7.7	0.5		~~8.3~~
		60ml	20%	7.5	4.5	3.0		15.0
								15.0

Source of Seed: ______________ **Lab Tech:** JM

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO overflow #6
Sample Date : 9-12-00 @ 2:00AM
Sample Notes:

pH	D.O.	NH_3-N	CN^-
7.18	1.8	4.14	

E. Coliform

ml of Sample	1	10	
Colony Count	TNTC	TNTC	

Calculation:
Colony Counts ______ + ______ + ______
ml of Sample ______ + ______ + ______
Sum of Colony Counts ______ x 100 / Sum of ml ______ = TNTC Colonys/100ml

Total Suspended Solids

ml of sample	#6 100ml			
Gross	25.3315			
Tare	25.3257			
Difference	.0058			
Solids in mg/l	580			

CBOD5
Date Incubated: 9-12-00 Date Removed: 9-17-00

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
		18ml	6%	8.1	7.8	0.3		~~5.0~~
		60ml	20%	7.3	4.5	2.8		14.0
								14.0

Source of Seed: ______ **Lab Tech:** JM

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO overflow #7
Sample Date : 9-12-00 @ 2:15AM
Sample Notes:

pH 7.27 **D.O.** 1.8 **NH_3-N** 4.23 **CN^-**

E. Coliform

ml of Sample	1	10	
Colony Count	TNTC	TNTC	

Calculation:
Colony Counts ________ + ________ + ________
ml of Sample ________ + ________ + ________
Sum of Colony Counts ______ **x 100 / Sum of ml** ______ = TNTC **Colonys/100ml**

Total Suspended Solids

ml of sample	#7 100ml			
Gross	24.8512			
Tare	24.8458			
Difference	.0054			
Solids in mg/l	540			

CBOD5

Date Incubated: 9-12-00 Date Removed: 9-17-00

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
		18ml	6%	8.2	7.9	0.3		~~5.0~~
		60ml	20%	7.5	4.6	2.9		14.5
								14.5

Source of Seed: ____________ **Lab Tech:** JM

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO overflow #8
Sample Date : 9-12-00 @ 2:30AM
Sample Notes:

pH 7.16 **D.O.** 1.8 **NH_3-N** 4.21 **CN^-**

E. Coliform

ml of Sample	1	10	
Colony Count	TNTC	TNTC	

Calculation:
Colony Counts ______ + ______ + ______
ml of Sample ______ + ______ + ______
Sum of Colony Counts ______ x 100 / Sum of ml ______ = TNTC Colonys/100ml

Total Suspended Solids

ml of sample	#8 100ml			
Gross	21.5656			
Tare	21.5604			
Difference	.0052			
Solids in mg/l	~~N~~ 52.0			

CBOD5

Date Incubated: 9-12-00 Date Removed: 9-17-00

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
		18ml	6%	8.1	7.8	0.3		~~5.0~~
		60ml	20%	7.4	4.6	2.8		14.0
								14.0

Source of Seed: ______ **Lab Tech:** JM

Recheck = 8.3

CSO Overflow

9-12-00

START @ 12:30

	TIME	pH	D.O.	Temp
	Flow over small weir - lots of algae			
FIRST SAMPLE @ #1	12:45 A	7.17	1.9	21.4
	Flow STARTing over large weir in places algae clearing up			
#2	1:00 A	7.16	1.7	21.4
	Flow full over large weir			
#3	1:15A	7.29	1.8	21.5
	Heavy Flow, sample has darkish TINT now VS green earlier			
#4	1:30 A	7.22	1.8	21.4
	Heavy Flow, still RAINING, sample very Turbid			
#5	1:45A	7.26	1.9	21.3
	Flow still increasing, sample looks like its clearer			
#6	2:00A	7.18	1.8	21.3
	Flow still increasing, still RAINing, sample turbidity stable			
#7	2:15A	7.27	1.8	21.1
#8	2:30A	7.16	1.8	21.2

Will Run CBOD, TSS, NH_3, CN, METS, COLIFORM, TKN as N, T.S.

CBOD ↓ 10%, 20% ; TSS ↓ 100ml ; NH_3 ↓ ½ btl ; CN ↓ ½L ; METS ↓ ½L

TOTAL & soluble metals (?)

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 110993

Date: 10/13/2000

CUSTOMER: La Porte Waste Water Treatment Plant PROJECT: WASTEWATER ATTN: Matthew Amor

Customer Sample ID: CSO OVERFLOW #1
Date Sampled......: 09/12/2000
Time Sampled......: 12:45
Sample Matrix.....: Water

Laboratory Sample ID: 110993-3
Date Received.......: 09/27/2000
Time Received.......: 12:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	0.011	0.010	mg/L	09/29/00	bjl
EPA 200.7	Copper (Cu)	0.030	0.010	mg/L	09/29/00	bjl
EPA 200.7	Nickel (Ni)	<0.010	0.010	mg/L	09/29/00	bjl
EPA 200.7	Zinc (Zn)	0.051	0.010	mg/L	10/03/00	chh
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	09/29/00	chh
EPA 239.2	Lead (Pb)	0.009	0.005	mg/L	10/04/00	chh

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 110993

Date: 10/13/2000

CUSTOMER: La Porte Waste Water Treatment Plant PROJECT: WASTEWATER ATTN: Matthew Amor

Customer Sample ID: CSO OVERFLOW #3
Date Sampled......: 09/12/2000
Time Sampled......: 13:15
Sample Matrix.....: Water

Laboratory Sample ID: 110993-4
Date Received.......: 09/27/2000
Time Received.......: 12:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	0.015	0.010	mg/L	09/29/00	bjl
EPA 200.7	Copper (Cu)	0.042	0.010	mg/L	09/29/00	bjl
EPA 200.7	Nickel (Ni)	0.011	0.010	mg/L	09/29/00	bjl
EPA 200.7	Zinc (Zn)	0.063	0.010	mg/L	10/03/00	chh
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	09/29/00	chh
EPA 239.2	Lead (Pb)	0.010	0.005	mg/L	10/04/00	chh

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 110993

Date: 10/13/2000

CUSTOMER: La Porte Waste Water Treatment Plant PROJECT: WASTEWATER ATTN: Matthew Amor

Customer Sample ID: CSO OVERFLOW #5
Date Sampled......: 09/12/2000
Time Sampled......: 13:45
Sample Matrix.....: Water

Laboratory Sample ID: 110993-5
Date Received.......: 09/27/2000
Time Received.......: 12:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	0.018	0.010	mg/L	09/29/00	bjl
EPA 200.7	Copper (Cu)	0.044	0.010	mg/L	09/29/00	bjl
EPA 200.7	Nickel (Ni)	0.014	0.010	mg/L	09/29/00	bjl
EPA 200.7	Zinc (Zn)	0.084	0.010	mg/L	10/03/00	chh
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	09/29/00	chh
EPA 239.2	Lead (Pb)	0.015	0.005	mg/L	10/04/00	chh

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 110993

Date: 10/13/2000

CUSTOMER: La Porte Waste Water Treatment Plant   PROJECT: WASTEWATER   ATTN: Matthew Amor

Customer Sample ID: CSO OVERFLOW #7
Date Sampled......: 09/12/2000
Time Sampled......: 14:15
Sample Matrix.....: Water

Laboratory Sample ID: 110993-6
Date Received.......: 09/27/2000
Time Received.......: 12:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	0.024	0.010	mg/L	09/29/00	bjl
EPA 200.7	Copper (Cu)	0.044	0.010	mg/L	09/29/00	bjl
EPA 200.7	Nickel (Ni)	<0.010	0.010	mg/L	09/29/00	bjl
EPA 200.7	Zinc (Zn)	0.104	0.010	mg/L	09/29/00	bjl
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	09/29/00	chh
EPA 239.2	Lead (Pb)	0.018	0.005	mg/L	10/04/00	chh

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO OVERFLOW 5-8
Sample Date : 2-24-01
Sample Notes: ______________________

pH [ ] **D.O.** [ ] **NH_3-N** [ ] **CN^-** [ ]

E. Coliform

ml of Sample			
Colony Count			

Calculation:
Colony Counts ______ + ______ + ______
ml of Sample ______ + ______ + ______
Sum of Colony Counts ______ **x 100 / Sum of ml** ______ = ______ **Colonys/100ml**

Total Suspended Solids

ml of sample	50 ml #5	50 ml #6	50 ml #7	50 ml #8
Gross	25.2789	25.3318	25.3551	21.5647
Tare	25.2704	25.3235	25.3459	21.5576
Difference	.0085	.0083	.0092	.0071
Solids in mg/l	170	166	184	142

algae

CBOD5

Date Incubated: Date Removed:

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
#5		30	10%	8.2	6.7	1.5		~~15.0~~
#5		90	30%	8.3	2.6	5.7		19.0
#6		30	10%	8.2	6.9	1.3		~~13.0~~
#6		90	30%	8.2	2.6	5.6		18.7
#7		30	10%	8.2	6.5	1.7		~~17.0~~
#7		90	30%	8.4	2.7	5.7		19.0
#8		30	10%	8.1	6.8	1.3		~~13.0~~
#8		90	30%	7.8	3.0	4.8		16.0

Source of Seed: ______________ **Lab Tech:** ______________

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO OVERFLOW 1-4
Sample Date : 2-24-01
Sample Notes: ______

pH [ ] D.O. [ ] NH_3-N [ ] CN^- [ ]

E. Coliform

ml of Sample			
Colony Count			

Calculation:
Colony Counts ____ + ____ + ____
ml of Sample ____ + ____ + ____
Sum of Colony Counts ____ x 100 / Sum of ml ____ = ____ Colonys/100ml

Total Suspended Solids

ml of sample	50ml #1	50ml #2	50ml #3	50ml #4
Gross	25.6254	24.4786	24.8677	22.0296
Tare	25.6179	24.4686	24.8578	22.0202
Difference	.0075	.0100	.0099	.0094
Solids in mg/l	150	200	198	188

algae

CBOD5

Date Incubated: Date Removed:

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l
#1		30ml	10%	7.8	5.2	2.0		20.0
#1		90ml	30%	8.2	1.3	6.9		23.0
#2		30	10%	8.2	6.7	1.5		~~15.0~~
#2		90	30%	8.4	1.8	6.6		22.0
#3		30	10%	8.3	6.6	1.7		~~17.0~~
#3		90	30%	8.4	2.2	6.2		20.7
#4		30	10%	8.2	6.5	1.7		~~17.0~~
#4		90	30%	8.3	2.3	6.0		20.0

> 21.5 AVG

Source of Seed: ______ Lab Tech: ______

Indiana Water Pollution Control Association, Inc.

Preserve up for NH_3

CSO OVERFLOW
2-24-01

1	START 7:05pm	pH - 6.24	D.O. 5.1	Temp 3.3 °C	LOTS OF Algae
2	+ :15	5.92	8.5	3.6	VERY GREEN
3	+ :30	5.22	10.3	3.4	GRAYISH
4	+ :45	5.28	10.5	3.3	G-G
5	+ 1:00	6.10	10.1	4.2	G-G
6	+ 1:15	6.78	9.5	3.2	G-G
7	+ 1:30	6.79	9.8	3.4	LARGE ICE-FLO BLOCKING LARGE WEIR
8	+ 1:45	6.89	10.3	3.9	"
9	+ 2:00	6.84	8.4	3.8	

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 602497 Date: 03/14/2001

CUSTOMER: La Porte Waste Water Treatment Plant PROJECT: INFLUENT/EFFLUENT ATTN: Matthew Amor

Customer Sample ID: CSO Overflow #1
Date Sampled......: 02/24/2001
Time Sampled......: 07:20
Sample Matrix.....: Water

Laboratory Sample ID: 602497-1
Date Received.......: 03/08/2001
Time Received.......: 11:55

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	<0.010	0.010	mg/L	03/09/01	chh
EPA 200.7	Copper (Cu)	0.017	0.010	mg/L	03/10/01	chh
EPA 200.7	Nickel (Ni)	<0.010	0.010	mg/L	03/09/01	chh
EPA 200.7	Zinc (Zn)	0.153	0.010	mg/L	03/09/01	chh
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	03/10/01	chh
EPA 239.2	Lead (Pb)	0.026	0.005	mg/L	03/10/01	pal

SEVERN TRENT SERVICES

L A B O R A T O R Y   T E S T   R E S U L T S

Job Number: 602497

Date: 03/14/2001

CUSTOMER: La Porte Waste Water Treatment Plant   PROJECT: INFLUENT/EFFLUENT   ATTN: Matthew Amor

Customer Sample ID: CSO Overflow #3
Date Sampled......: 02/24/2001
Time Sampled......: 07:50
Sample Matrix.....: Water

Laboratory Sample ID: 602497-2
Date Received.......: 03/08/2001
Time Received.......: 11:55

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	<0.010	0.010	mg/L	03/09/01	chh
EPA 200.7	Copper (Cu)	0.028	0.010	mg/L	03/10/01	chh
EPA 200.7	Nickel (Ni)	<0.010	0.010	mg/L	03/09/01	chh
EPA 200.7	Zinc (Zn)	0.168	0.010	mg/L	03/09/01	chh
EPA 213.2	Cadmium (Cd)	0.0006	0.0005	mg/L	03/10/01	chh
EPA 239.2	Lead (Pb)	0.042	0.005	mg/L	03/10/01	pal

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 602497

Date: 03/14/2001

CUSTOMER: La Porte Waste Water Treatment Plant   PROJECT: INFLUENT/EFFLUENT   ATTN: Matthew Amor

Customer Sample ID: CSO Overflow #5
Date Sampled......: 02/24/2001
Time Sampled......: 08:20
Sample Matrix.....: Water

Laboratory Sample ID: 602497-3
Date Received.......: 03/08/2001
Time Received.......: 11:55

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	<0.010	0.010	mg/L	03/09/01	chh
EPA 200.7	Copper (Cu)	0.023	0.010	mg/L	03/10/01	chh
EPA 200.7	Nickel (Ni)	0.014	0.010	mg/L	03/09/01	chh
EPA 200.7	Zinc (Zn)	0.150	0.010	mg/L	03/09/01	chh
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	03/10/01	chh
EPA 239.2	Lead (Pb)	0.033	0.005	mg/L	03/10/01	pal

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 602497

Date: 03/14/2001

CUSTOMER: La Porte Waste Water Treatment Plant PROJECT: INFLUENT/EFFLUENT ATTN: Matthew Amor

Customer Sample ID: CSO Overflow #7
Date Sampled......: 02/24/2001
Time Sampled......: 08:50
Sample Matrix.....: Water

Laboratory Sample ID: 602497-4
Date Received.......: 03/08/2001
Time Received.......: 11:55

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	0.018	0.010	mg/L	03/09/01	chh
EPA 200.7	Copper (Cu)	0.026	0.010	mg/L	03/10/01	chh
EPA 200.7	Nickel (Ni)	0.012	0.010	mg/L	03/09/01	chh
EPA 200.7	Zinc (Zn)	0.162	0.010	mg/L	03/09/01	chh
EPA 213.2	Cadmium (Cd)	0.0005	0.0005	mg/L	03/10/01	chh
EPA 239.2	Lead (Pb)	0.040	0.005	mg/L	03/10/01	pal

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO overflow

Sample Date : 7-7-01

Sample Notes: ______________________________

pH [ ] D.O. [ ] NH_3-N [ ] CN^- [ ]

E. Coliform

ml of Sample			
Colony Count			

Calculation:

Colony Counts ______ + ______ + ______

ml of Sample ______ + ______ + ______

Sum of Colony Counts ______ x 100 / Sum of ml ______ = ______ Colonys/100ml

Total Suspended Solids

ml of sample	#3 100ml	#8 100ml	#1 100ml	#2 100ml
Gross	24.8680	21.5688	25.6312	24.4761
Tare	24.8607	21.5621	25.6214	24.4714
Difference	.0073	.0067	.0098	.0047
Solids in mg/l	73	67	98	47

CBOD5

Date Incubated: 7-7-0 Date Removed: 7-12-01

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l	
#1		18ml	6%	8.2	8.1	0.1		1.7	X
#1		60ml	20%	8.0	6.2	1.8		9.0	X<
#2		18ml	6%	8.1	7.9	0.2		3.3	X
#2		60ml	20%	7.4	5.1	2.3		11.5	
#3		18ml	6%	8.2	8.3	—			X
#3		60ml	20%	7.8	6.1	1.7		8.5	X<
#4		18ml	6%	8.1	7.4	0.7		11.7	X
#4		60ml	20%	7.8	5.0	2.8		14.0	

Source of Seed: ____________ Lab Tech: ____________

La Porte Wastewater Treatment Plant Laboratory

Miscellaneous Sample Data Sheet

Sample I.D. : CSO overflow

Sample Date : 7-7-01

Sample Notes:

pH ☐ **D.O.** ☐ **NH_3-N** ☐ **CN^-** ☐

E. Coliform

ml of Sample			
Colony Count			

Calculation:

Colony Counts ____ + ____ + ____

ml of Sample ____ + ____ + ____

Sum of Colony Counts ____ **x 100 / Sum of ml** ____ = ____ Colonys/100ml

Total Suspended Solids

ml of sample	#4 100ml	#5 100ml	#6 100ml	#7 100ml
Gross	22.0300	25.2810	25.3344	25.3565
Tare	22.0231	25.2737	25.3274	25.3486
Difference	.0069	.0073	.0070	.0079
Solids in mg/l	69	73	70	79

CBOD5

Date Incubated: Date Removed:

Sample I.D.	ml of Seed	ml of Sample	Percent Conc.	Initial D.O.	5 Day D.O.	D.O. Depletion	Minus Seed Factor	CBOD in mg/l	
#5		18l	6%	8.1	7.8	0.3		5.0	X
#5		60l	20%	7.8	5.4	2.4		12.0	
#6		18l	6%	8.2	7.7	0.5		8.3	X
#6		60l	20%	7.8	5.5	2.3		11.5	
#7		18l	6%	8.2	7.7	0.5		8.3	X
#7		60l	20%	7.9	5.4	2.5		12.5	
#8		18l	6%	8.2	8.2	—0		—	X
#8		60l	20%	8.0	5.9	2.1		10.5	

Source of Seed:____ **Lab Tech:**____

325-0727

OVERFLOW @ 7:50 AM

	START	PH	DO	Temp	NOTES
	#1	6.70	5.4	20.5	
+15	#2	6.11	3.6	19.8	Large weir overflowing
+30	#3	6.50	4.6	19.8	
+45	#4	6.52	5.0	19.5	
+60	#5	6.58	4.6	19.7	6.3 at bottom of weir
+75	#6	6.94	4.4	20.0	5.7 @ bottom
+90	#7	6.85	4.6	20.0	5.9 @ bottom
+105	#8	6.89	5.0	19.9	6.3 @ bottom

E. COLIFORM

	/ml	TOTAL	
#1	36	3600	
#2	TNTC	~~>23,500~~	>200,000
#3	TNTC	~~>23,500~~	>200,000
#4	TNTC	~~>23,500~~	>200,000
#5	TNTC	~~>23,500~~	>200,000
#6	TNTC	~~>23,500~~	>200,000
#7	TNTC	~~>23,500~~	>200,000
#8	TNTC	~~>23,500~~ JM	>200,000

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 607201

Date: 07/18/2001

CUSTOMER: La Porte Waste Water Treatment Plant PROJECT: INFLUENT/EFFLUENT ATTN: Matthew Amor

Customer Sample ID: CSO OVERFLOW #1
Date Sampled......: 07/07/2001
Time Sampled......: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 607201-3
Date Received.......: 07/09/2001
Time Received.......: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	<0.010	0.010	mg/L	07/10/01	chh
EPA 200.7	Copper (Cu)	0.021	0.010	mg/L	07/10/01	chh
EPA 200.7	Nickel (Ni)	<0.010	0.010	mg/L	07/10/01	chh
EPA 200.7	Zinc (Zn)	0.074	0.010	mg/L	07/17/01	chh
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	07/15/01	chh
EPA 239.2	Lead (Pb)	0.018	0.005	mg/L	07/11/01	chh

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 607201

Date: 07/18/2001

CUSTOMER: La Porte Waste Water Treatment Plant PROJECT: INFLUENT/EFFLUENT ATTN: Matthew Amor

Customer Sample ID: CSO OVERFLOW #3
Date Sampled......: 07/07/2001
Time Sampled......: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 607201-4
Date Received.......: 07/09/2001
Time Received.......: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	<0.010	0.010	mg/L	07/10/01	chh
EPA 200.7	Copper (Cu)	0.027	0.010	mg/L	07/10/01	chh
EPA 200.7	Nickel (Ni)	0.013	0.010	mg/L	07/10/01	chh
EPA 200.7	Zinc (Zn)	0.062	0.010	mg/L	07/17/01	chh
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	07/15/01	chh
EPA 239.2	Lead (Pb)	0.023	0.005	mg/L	07/11/01	chh

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 607201 Date: 07/18/2001

CUSTOMER: La Porte Waste Water Treatment Plant PROJECT: INFLUENT/EFFLUENT ATTN: Matthew Amor

Customer Sample ID: CSO OVERFLOW #5
Date Sampled......: 07/07/2001
Time Sampled......: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 607201-5
Date Received.......: 07/09/2001
Time Received.......: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	<0.010	0.010	mg/L	07/10/01	chh
EPA 200.7	Copper (Cu)	0.041	0.010	mg/L	07/10/01	chh
EPA 200.7	Nickel (Ni)	<0.010	0.010	mg/L	07/10/01	chh
EPA 200.7	Zinc (Zn)	0.088	0.010	mg/L	07/17/01	chh
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	07/15/01	chh
EPA 239.2	Lead (Pb)	0.028	0.005	mg/L	07/11/01	chh

SEVERN TRENT SERVICES

LABORATORY TEST RESULTS

Job Number: 607201

Date: 07/18/2001

CUSTOMER: La Porte Waste Water Treatment Plant   PROJECT: INFLUENT/EFFLUENT   ATTN: Matthew Amor

Customer Sample ID: CSO OVERFLOW #7
Date Sampled......: 07/07/2001
Time Sampled......: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 607201-6
Date Received.......: 07/09/2001
Time Received.......: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 200.7	Chromium (Cr)	<0.010	0.010	mg/L	07/10/01	chh
EPA 200.7	Copper (Cu)	0.042	0.010	mg/L	07/10/01	chh
EPA 200.7	Nickel (Ni)	<0.010	0.010	mg/L	07/10/01	chh
EPA 200.7	Zinc (Zn)	0.077	0.010	mg/L	07/17/01	chh
EPA 213.2	Cadmium (Cd)	<0.0005	0.0005	mg/L	07/15/01	chh
EPA 239.2	Lead (Pb)	0.026	0.005	mg/L	07/11/01	chh

Herald-Argus

Second Front

Jail work moves along

Fine weather has helped expansion stay on track

CHRIS JACOBS
THE LAPORTE HERALD ARGUS

LaPorte County Commissioner Marlow Harmon says the LaPorte County Jail expansion is going "extremely well."

Bed space up to a capacity of 350 is being added to the jail. It currently has 135 beds and on average, 225 inmates.

"So far we are ahead on our time schedule and well under budget," Harmon said.

The estimated cost for the project is $22 million.

Harmon said an early change of $370,000 less in construction materials has allowed some additional things to be put back into the construction.

"It has also kept us under budget, which is really good," Harmon said.

He said DLZ, the architectural firm for the project, has been keeping a close eye on costs. He also said favorable weather has kept things going smoothly.

Builder Larson-Danielson has been working hard to keep things within or below the specified budget.

LaPorte County Sheriff Jim Arnold invited members of the LaPorte County Council and Commission to tour the construction site Monday afternoon. He explained that things are going well, but not without problems.

"Most of our major issues are with the kitchen facilities. We used to bring all food deliveries through the sally port area (a vehicle entrance on the east end of the county complex off Washington Street), but that is closed so it can be made into offices. So we have to bring food in from a side door and down through the main county complex elevator," Arnold said. "There are just problems continually cropping up."

Arnold also talked about electrical problems in the kitchen area. No electrical work has been done in that area of the complex since it was built in 1977.

"Because nothing new has ever been done to those electrical wires, they have sustained a lot of water damage over the years. And now, from the construction, or just from wear and tear, they shorted out," Arnold said. "The power has been fluctuating and it finally went off. So we have to rewire everything and then when we remodel the kitchen later, we'll have to take all this wiring out and re-do everything again."

The sheriff estimated that construction would be completed in December 2003. He said he and Larson-Danielson have weekly update meetings.

"It may not look like we've gotten a lot accomplished, but we really have done a lot in four months," Arnold said.

Arnold said there have been few change orders requiring additional funds.

"We have only had a few change orders and they have been fairly small. Saving money has been first and foremost on this project," Arnold said.

BY CHRIS JACOBS/STAFF

LAPORTE COUNTY Sheriff Jim Arnold explains the layout of the new sally port area on the east side of the county jail building to members of the LaPorte County Council and Commission Monday afternoon.

Casinos here take in record $90.4M in March

GARY (AP) — The five casinos in northwest Indiana took in a record $90.4 million in March and $259.3 million in the first three months this year.

Ironically, a sluggish economy in the area may be at least partly responsible for the record take, one casino spokesman said.

"Certainly in this market, being a day-trip market so to speak versus some markets that have been hurt, we've been able to benefit from the fact that people are not being able to travel to Las Vegas," Jef Bauer of the Majestic Star casino told the Gary Post Tribune.

The Blue Chip casino in Michigan City, which is just minutes from the Michigan border, made $16.6 million in March and $49.9 million for the quarter.

The Majestic Star's revenues of $11.4 million in March and $31.1 million for the quarter were the lowest among the five. The Horseshoe casino of Hammond, the closest for Chicago residents, was tops with a record $26 million in March.

Figiel is new H-A staffer

Figiel

Sara Figiel has joined The LaPorte Herald-Argus as a staff photographer.

The Park Forest, Ill., resident is a recent journalism graduate of Eastern Illinois University, where she was photo editor and a staff writer for The Daily Eastern News student newspaper. She also played on the women's varsity soccer team.

Figiel, 22, also held staff photographer positions for the Journal Gazette, Mattoon, Ill., and Times-Courier, Charleston, Ill., while attending school. Figiel joins Bob Wellinski on the H-A photography staff.

Residents of McClung lash out at mayor

Claim they weren't told of impending drainage work

DANIEL PRZYBYLA
THE LAPORTE HERALD ARGUS

LaPorte Mayor Kathy Chroback is catching the backlash from McClung Road residents over plans to install a storm drainpipe under the road in coming weeks.

Several residents attended Monday's LaPorte City Council meeting to voice their opposition to the city's plan to divert storm water that collects off the 100 west block of McClung into a pipe that could eventually trickle down into Fish Trap Lake.

Donna McCleery, 135 W. McClung Rd., said the city has been anything but up front about a drainage project that residents have been inquiring about for the last several years.

That's an accusation Chroback ...

... of the alternate routes to Pine Lake Avenue while the avenue is being widened.

Road resurfacing will cost $125,000. The quotes for the sewer work will be opened Wednes...

... the storm sewer project is done.

"Again, I'm not sending the water into the lake," Chroback said following the meeting. "It's going under the road, it's going to be engineered to trickle through rocks. If it starts shooting through there, we'll cap it, we'll close it."

Schmitt's concerns

Schmitt said he shares his constituents' concerns over storm water potentially draining into the lake.

"I tried to kind of meet them halfway and that would to put a valve on the drain that would shut it off if the lake levels got ...

BRIEFS

Officer's wife accidentally shot

PORTER (AP) — A woman changing the sheets on a bed was shot when a gun kept under the mattress apparently discharged accidentally, police said.

Betty Scott, 31, whose husband Chris Scott is a sergeant with the Porter police department, was listed in serious condition Monday at Porter Memorial Hospital in Valparaiso.

Chris Scott found his wife shortly after he finished working at 9 p.m. Saturday. Betty Scott was alone at the time the gun went off and was unable to call for assistance after being shot in the chest, police said. Investiga... sure exactly when she was shot.

The gun, a .38-caliber Smith and Wesson revolver, is owned by Chris Scott but is not owned by police department in the town of about 3,100 people near Lake Michigan.

People can talk sewage

The LaPorte Wastewater Department will hold a public meeting at 10 a.m. Wednesday at City Hall to allow residents to ask questions about the city's upcoming combined sewage overflow control plan.

Wastewater Superintendent Jerry Jackson said he'll update the public about where the city stands with its plan and the direction the plan will take in the future.

The plan is designed to create ways to prevent untreated sewage from flowing into waterways. At times, untreated sewage has bypassed the treatment plant and poured into Travis Ditch. Four times in 2001, untreated sewage flowed into a ditch behind the treatment plant, filled a 17-acre holding pond there and subsequently flowed into Travis Ditch.

About 100 sewage overflows occurred prior to the lake-level control system being constructed in 1998. The state wants municipalities to reduce the environmental harm caused when sewage rife with bacteria flows into bodies of water.

Standing up to be heard not easy, but needed

Adam King, vice president of the LaPorte High School junior class, got up before the LaPorte School Board last Tuesday and said some of his peers weren't happy ...

I WAS JUST THINKING...

You write a column and everyone has an opinion of whether you were right or wrong.

If you get up and speak your ...

... to see the rest of the old Allis-Chalmers and surrounding sites to be used for.

About 60 people showed up ...

SECTION 2.0: PUBLIC PARTICIPATION

"Public Participation" is an essential part of the Long Term Control Plan (LTCP). The City of La Porte has formed a Citizen Action Committee (CAC) and has had several meetings. The steps taken by La Porte are as follows:

- William Hupp, P.E., from NIES Engineering, Inc., Brett Barber, from Malcom Piernie, Inc., Jerry Jackson, Superintendent for the La Porte Treatment Plant met with the La Porte Board of Public Works and Safety on April 10, 2002. Present from the Board was Mayor Kathy Chroback, Jack Rosenberg, Member and Al Hinton, Member. The meeting was to inform the Board of the need to form a CAC. It was explained that CAC's should be formed to act as liaisons among municipal officials, NPDES permitting agencies, and the general public. There were recommendations made and the Mayor said she would call the different individuals and get the committee formed.
- The La Porte Herald Argus Newspaper had an article titled "People can talk sewage" in the April 23, 2002 paper. This was an open invitation for anyone who may be interested to come to the first CAC meeting.
- The first meeting of the CAC was held April 24, 2002, at 10:00 a.m. at La Porte City Hall. It was explained that a LTCP must contain the following elements: 1. Establish public participation process. 2. Consider impacts to sensitive areas near CSO discharge points. 3. Post-construction compliance monitoring program and sampling protocol. The purpose of the committee was discussed as well as La Porte's sewer system and CSO location.
- The second meeting of the CAC was held May 14, 2002 at the La Porte Wastewater Treatment Plant. The installation of the CSO return pump station was discussed and how the system works. The phasing of the CSO LTCP were discussed. Phase I included increasing the volume of CSO that can be stored in the lagoon, increase pumping capacity of the CSO return pump station, installing a fine screen at the inlet to the CSO basin and look at plant hydraulics to increase the maximum flow through the plant. Phase II was to look at areas of street ponding and to determine a method to reduce this ponding. After the meeting all person present were taken for a tour of the plant and CSO basin the CSO outlet structure.
- The third meeting was held June 12, 2002, at the Wastewater Treatment Plant. Phase I was discussed in detail with the associated cost for each improvement. The items discussed are as follows: 1. Modification to the Outlet Structure to raise the weir elevation. 2. Construct a earth dike on the east side of the basin and install a 60" RC pipe in an existing ditch along side of the basin edge and cover with earth. 3. Modify the CSO return pump station to 3500 gpm. Phase II projects discussed were as follows: 1. Install a screening facility at the inlet to the CSO basin. 2. Removal of accumulated sludge in the CSO basin.
- The fourth meeting was July 18, 2002 at the Wastewater Treatment Plant. The Draft LTCP was discussed and the final plan will be sent to IDEM on July 31, 2002. Malcom Pirenie has sent a written request to DNR regarding endangered species.

SUMMARY OF CAC MEETING, APRIL 24, 2002

The following people were in attendance:

1. Brett Barber, Malcolm Pirnie
2. William Hupp, P.E., NIES Engineering
3. Jerry Jackson, La Porte WWTP Superintendent
4. Mayor Kathy Chroback
5. Al Hinton, Board of Public Works
6. Jack Rosenberg, Board of Public Works
7. Jim Keil, La Porte County Surveyor/Member of La Porte County Drainage Board
8. John Hodawal, Interested Observer/Resident of the City
9. Mathew Vigneault, La Porte Economic Development Corporation
10. Andrea Renner, La Porte City Council
11. Larry Yazel, Farmer downstream of La Porte's CSO
12. Robert Boklund, La Porte Co. Cons. Trust
13. Todd Taylor, Resident of La Porte/La Porte Water Dept. Superintendent

Everyone introduced themselves to the group.

Mr. Brett Barber discussed the items that are part of the LTCP and they are as follows:

1. Consideration of sensitive areas
2. Public participation
3. Characterization, monitoring, and modeling
4. Evaluation of alternatives
5. Maximize flow through the POTW
6. Development of cost/performance curve
7. Financial capability and implementation schedule
8. Post-Construction compliance monitoring program

There was a general discussion of the CSO and the people were told that before 1998 the CSO quantity was 150± million gallons and after installation of the return pump station the CSO quantity is 10± million gallons.

There will be a meeting of Malcolm Pirnie, NIES Engineering and the staff of the WWTP to discuss the sewer problems and come up with alternatives to solve these problems. This will be the subject of the next CAC meeting.

The Next meeting is May 15, at 4:00 PM at the La Porte WWTP.

Name	Representing	Phone
Brett Barber	Malcolm Pirnie	317.469.0639
John Rosenberg	BOW	362-2385
Kathy Chrobach	BOW	362-8220
Al Hinton	BOW	362.8547
Jim Kell	LaPorte Co Surveyor	326-6808
JERRY P JACKSON	CITY OF LAPORTE	362-2354
JOHN W. HODOWAL	INTERESTED OBSERVER	325-8012
MATTHEW VIGNEAULT	LAPORTE EDC AND Citizen	324-8584
Andrea L Renner	LaPorte City Council	324-7521
LARRY YAZEL	LAPORTE Co. (FARM)	369-9130
Robert J. Boklund	La Port Co Cons. Trust	H 326-8953 W 873-2383
Todd A. Taylor	Citizen/LaPorte Water Dept.	326-9540
William Hupp	NIES Engineering	219.844.8680

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Received Event (Event Succeeded)

Date:	6/11/02	**Time:**	3:22 PM
Pages:	2	**Sender:**	219 844 7754
Company:		**Fax Number:**	

06/11/2002 15:22 219-844-7754 NIES ENGINEERING PAGE 01

CAC MEETING ATTENDANCE

DATE: May 15, 2002

NAME	REPRESENTING	PHONE/FAX
William Hupp	NIES Engineering	(219)844-8680 / " " 7754 (FAX)
Joe Peters	NIES Engineering	" "
Al Hinton	Board of Works	3628547/362-8549
Jerry P Jackson	LaPorte Wastewater	362-2354
Jim McMahon	LaPorte Wastewater	362-2354
Brett Barber	Malcolm Pirnie	317.469.0639
[illegible]	LaPorte Co. Conservation Trust	(219) 326-8955
Karly Chapell	Property Owner	219-362-3361
Matthew J. Vigneault	Greater LaPorte EDC	219-324-8584
Kathy Chroback	Mayor	219-362-8220

(NIES) engineering, inc.
2421 173rd Street, Hammond, Indiana 46323
Ph: (219) 844 8680 | Fax: (219) 844 7754
e-mail: mail@niesengineering.com
municipal, civil, environmental, & transportation engineering

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BRIEFS

LAPORTE

Teen arrested in gun incident

A 15-year-old Kingsford Heights teen was arrested Wednesday night after he reportedly pointed a loaded handgun at a man walking down the street.

The 15-year-old, charged with criminal recklessness and possessing a handgun without a permit, is being held at the Juvenile Services Center secure side.

According to LaPorte City Police, a 19-year-old man was walking in the area of G and 6th streets when an eastbound Chevy Lumina, with three teens inside, slowly drove by at 6:20 p.m. As the van passed, the passenger allegedly stuck his arm out the window and pointed a handgun at the walker, who was able to get a license plate number and call police.

LaPorte City Police Officer Tom Heath later spotted the van, which pulled over in the 500 block of H Street while Heath waited for other officers to arrive. The gun was found under the front passenger seat.

City hearing on sewage overflows

The LaPorte Board of Public Works and Safety will conduct a public hearing at 10 a.m. next Wednesday at City Hall on the city's long-term control plan for combined sewage overflow. Wastewater Superintendent Jerry Jackson will review the steps planned to prevent untreated sewage overflow from combined and sanitary sewers into Travis Ditch after heavy rainfall. Indiana Department of Environmental Management representatives will attend as well.

The city's treatment plant has enough capacity to handle the combined flows except during concentrated periods of heavy rainfall. In 2003, there was only one untreated sewage overflow into Travis Ditch, compared to hundreds annually years ago. The control plan calls for the city to increase its storage lagoon capacity to accommodate overflow from 11 to 22 million gallons.

City of La Porte
INDIANA

City of La Porte
CSO-LTCP

Combined Sewer Overflow – Long Term Control Plan
May 5th, 2004 Public Meeting

Sign in sheet:

Name (Printed)	Signature	Business or Organization	Phone Number (If you wish to be contacted about future meetings)
JIM McMAHON	[signature]	City of LaPorte	219-362-6054
MICHAEL KUSS	[signature]	IDEM	219-881-6712
Hala Silvey	[signature]	IDEM	317 233-1208
Robert J. Boklund	[signature]	LPCCT	(219) 326-8953
Sharon Kirkham	Sharon K Kirkham	City Council - LP	219-326-7649
Cindi Boardman	Cindi Boardman	City of LaPorte	219-326-7313
Pat Pease	Pat Pease	CITY OF LAPORTE	219-362-9512
Marilyn Poag	Marilyn Poag	" " "	219-362-2283
Leigh Morris	[signature]	" " "	219-362-8220
RICHARD SCHMITT	[signature]	" " "	219-362-1515
Arthur L Roule Jr	Arthur L Roule, Jr	City Attorney	219-362-3181
DAN PRZYBYLA	Daniel Przybyla	HERALD-ARGUS	362-2161
Donna McCleery	Donna McCleery	—	3268645

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
12/01/1996	7.11	0.79	7.86	2.54	
12/02/1996	6.19		0.00	0.28	
12/03/1996	5.78	0.06	0.00	0.04	
12/04/1996	5.61		0.00	0.00	
12/05/1996	5.82	0.13	0.00	0.00	
12/06/1996	5.94		0.25	0.00	
12/07/1996	5.67		0.00	0.00	
12/08/1996	5.35	0.02	0.00	0.00	
12/09/1996	5.59		0.00	0.00	
12/10/1996	5.42		0.00	0.00	
12/11/1996	7.17	0.51	6.50	1.48	
12/12/1996	6.58	0.04	0.00	0.28	
12/13/1996	5.91		0.00	0.03	
12/14/1996	5.72		0.10	0.00	
12/15/1996	5.73	0.10	0.00	0.00	
12/16/1996	5.93	0.01	0.00	0.00	
12/17/1996	5.65	0.20	0.00	0.00	
12/18/1996	5.39		0.00	0.00	
12/19/1996	5.90	0.03		0.00	
12/20/1996	5.17		4.00	0.00	
12/21/1996	5.18		0.00	0.00	
12/22/1996	4.92	0.01	0.00	0.00	
12/23/1996	8.21	1.07	14.64	7.22	
12/24/1996	6.40	0.10	0.00	0.65	
12/25/1996	5.47		0.00	0.12	
12/26/1996	5.86	0.07	0.00	0.02	
12/27/1996	5.83		0.00	0.00	
12/28/1996	5.85		0.00	0.00	
12/29/1996	5.43	0.01	0.00	0.00	
12/30/1996	5.45		0.00	0.01	
12/31/1996	4.87		0.00	0.00	
01/01/1997	5.65	0.09	0.16	0.00	
01/02/1997	5.84		0.00	0.01	
01/03/1997	5.76	0.01	0.86	0.00	
01/04/1997	6.13	0.22	2.55	0.06	
01/05/1997	5.18		0.00	0.05	
01/06/1997	5.11	0.02	0.00	0.00	
01/07/1997	5.01	0.01	0.00	0.00	
01/08/1997	5.03		0.00	0.00	
01/09/1997	5.21	0.34	0.00	0.00	
01/10/1997	4.48	0.13	0.00	0.02	
01/11/1997	4.48		0.00	0.01	
01/12/1997	4.32		0.00	0.06	
01/13/1997	4.82		0.00	0.05	
01/14/1997	4.87		0.00	0.02	
01/15/1997	5.07	0.34	0.00	0.17	
01/16/1997	4.93	0.19	0.00	0.07	
01/17/1997	4.84	0.03	0.00	0.03	
01/18/1997	4.67	0.12	0.00	0.19	
01/19/1997	4.96		0.00	0.00	
01/20/1997	5.33		0.00	0.01	
01/21/1997	7.47	0.56	13.10	4.32	
01/22/1997	8.37	0.11	12.51	2.80	
01/23/1997	6.65	0.03	0.00	0.41	
01/24/1997	6.24	0.04	0.00	0.13	
01/25/1997	5.60	0.03	0.00	0.02	

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
01/26/1997	5.16	0.12	0.00	0.27	
01/27/1997	5.80	0.13	0.00	0.07	
01/28/1997	5.82	0.02	0.00	0.01	
01/29/1997	5.79		0.00	0.00	
01/30/1997	5.70		0.00	0.00	
01/31/1997	6.17		0.00	0.00	
02/01/1997	5.60		0.00	0.00	
02/02/1997	5.56		0.00	0.00	
02/03/1997	6.18		3.01	0.09	
02/04/1997	7.77	0.44	9.46	1.55	
02/05/1997	6.38	0.01	0.00	0.35	
02/06/1997	6.13		0.00	0.15	
02/07/1997	5.58		0.00	0.01	
02/08/1997	5.36		0.00	0.00	
02/09/1997	5.51		0.00	0.00	
02/10/1997	5.15	0.01	0.00	0.00	
02/11/1997	5.43	0.07	0.00	0.00	
02/12/1997	5.52	0.12	0.00	0.00	
02/13/1997	5.80		0.00	0.00	
02/14/1997	5.63		0.00	0.00	
02/15/1997	4.88	0.01	0.00	0.00	
02/16/1997	5.12	0.18	0.00	0.00	
02/17/1997	5.73		0.00	0.00	
02/18/1997	7.32		6.33	0.08	
02/19/1997	6.94		0.00	0.03	
02/20/1997	8.66	0.82	17.08	4.71	
02/21/1997	9.02	1.46	18.98	8.74	
02/22/1997	8.11	0.14	6.30	0.89	
02/23/1997	7.05	0.02	2.65	0.46	
02/24/1997	6.92		0.00	0.33	
02/25/1997	6.97		0.11	0.14	
02/26/1997	8.95	1.21	17.71	8.08	
02/27/1997	9.01	0.12	17.51	2.54	
02/28/1997	8.72		0.00	0.72	
03/01/1997	8.48	0.03	0.00	0.33	
03/02/1997	8.14		0.00	0.17	
03/03/1997	8.54		0.00	0.09	
03/04/1997	8.30		0.00	0.07	
03/05/1997	7.51		0.00	0.09	
03/06/1997	7.44		0.00	0.08	
03/07/1997	7.32		0.00	0.03	
03/08/1997	7.02		0.00	0.04	
03/09/1997	7.95	0.35	6.61	0.79	
03/10/1997	7.69		0.00	0.44	
03/11/1997	7.18		0.00	0.21	
03/12/1997	7.06		0.00	0.09	
03/13/1997	8.36	0.51	9.63	1.42	
03/14/1997	7.85	0.27	0.01	0.89	
03/15/1997	7.07	0.01	0.00	0.35	
03/16/1997	6.92		0.00	0.16	
03/17/1997	7.38	0.02	0.00	0.05	
03/18/1997	7.09		0.00	0.05	
03/19/1997	7.18		0.00	0.04	
03/20/1997	7.19		0.00	0.03	
03/21/1997	8.03		0.00	0.02	
03/22/1997	7.52		0.00	0.01	

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
03/23/1997	7.30		0.00	0.00	
03/24/1997	8.15	0.12	4.53	0.09	
03/25/1997	7.75	0.11	0.00	0.15	
03/26/1997	8.02		0.00	0.05	
03/27/1997	8.26		0.00	0.04	
03/28/1997	8.93	0.77	16.04	2.47	
03/29/1997	8.41	0.30	0.00	1.03	
03/30/1997	7.80	0.04	0.00	0.34	
03/31/1997	7.79		0.26	0.15	
04/01/1997	7.81		0.00	0.06	
04/02/1997	7.93		0.00	0.04	
04/03/1997	8.24	0.01	0.00	0.03	
04/04/1997	8.46	0.10	4.50	0.11	
04/05/1997	8.36	0.68	8.51	1.92	
04/06/1997	7.78		0.00	0.55	
04/07/1997	8.01		0.00	0.18	
04/08/1997	7.76		0.00	0.06	
04/09/1997	7.92	0.01	0.00	0.01	
04/10/1997	8.16		0.00	0.00	
04/11/1997	8.38	0.14	2.95	0.03	
04/12/1997	7.81	0.14	0.00	0.15	
04/13/1997	8.03	0.05	1.51	0.09	
04/14/1997	7.77		0.00	0.01	
04/15/1997	7.27		0.00	0.01	
04/16/1997	7.46	0.08	0.00	0.00	
04/17/1997	6.33	0.03	0.00	0.06	
04/18/1997	7.76		0.00	0.10	
04/19/1997	7.74		0.00	0.03	
04/20/1997	7.62		0.00	0.00	
04/21/1997	7.75		0.00	0.00	
04/22/1997	7.65		0.00	0.00	
04/23/1997	7.99		0.00	0.00	
04/24/1997	8.46	0.49	7.26	0.45	
04/25/1997	7.77		0.15	0.21	
04/26/1997	7.83		0.00	0.06	
04/27/1997	7.29	0.04	0.00	0.01	
04/28/1997	8.03		0.00	0.00	
04/29/1997	7.85		0.00	0.00	
04/30/1997	8.13	0.60	6.06	1.61	
05/01/1997	8.09	0.47	3.86	1.40	
05/02/1997	7.91	0.28	5.43	1.11	
05/03/1997	7.83	0.07	0.00	0.54	
05/04/1997	7.83		0.00	0.16	
05/05/1997	8.21	0.58	4.80	1.20	
05/06/1997	8.05	0.01	0.00	0.47	
05/07/1997	8.38	0.29	5.03	0.34	
05/08/1997	7.78	0.07	0.00	0.38	
05/09/1997	7.95	0.04	0.00	0.14	
05/10/1997	7.83		0.00	0.03	
05/11/1997	7.24	0.04	0.00	0.00	
05/12/1997	7.71		0.00	0.00	
05/13/1997	7.52	0.03	0.00	0.00	
05/14/1997	6.79	0.11	0.00	0.00	
05/15/1997	7.55	0.16	2.58	0.06	
05/16/1997	7.05		0.00	0.02	
05/17/1997	6.66		0.00	0.00	

LaPorte CSO Overflow Data					
Date	**Plant Influent Flow MGD**	**Rain inches**	**Bypass to CSO Lagoon hours**	**CSO Lagoon Overflow MGD**	**CSO Lagoon Return Pump MGD**
05/18/1997	7.33	0.37	5.63	0.53	
05/19/1997	7.31	0.10	0.46	0.68	
05/20/1997	6.84		0.00	0.19	
05/21/1997	7.57		0.00	0.03	
05/22/1997	8.08		0.00	0.00	
05/23/1997	7.86		0.00	0.00	
05/24/1997	8.22	0.25	7.76	0.19	
05/25/1997	7.03	0.38	0.68	0.89	
05/26/1997	7.04		0.00	0.21	
05/27/1997	7.52		0.00	0.02	
05/28/1997	8.42	0.57	10.81	1.84	
05/29/1997	7.97	0.33	2.55	1.78	
05/30/1997	7.55		0.00	0.32	
05/31/1997	7.48		0.00	0.10	
06/01/1997	7.59	0.12	4.11	0.14	
06/02/1997	7.64	0.29	0.10	0.66	
06/03/1997	7.28		0.00	0.18	
06/04/1997	7.53		0.00	0.03	
06/05/1997	7.77		0.00	0.52	
06/06/1997	8.44	1.18	11.20	6.51	
06/07/1997	7.13	0.03	0.00	0.58	
06/08/1997	7.76		0.00	0.24	
06/09/1997	7.70		0.00	0.06	
06/10/1997	7.15		0.00	0.00	
06/11/1997	6.92		0.00	0.00	
06/12/1997	7.32	0.23	0.00	0.04	
06/13/1997	7.96		0.05	0.02	
06/14/1997	7.54		0.00	0.00	
06/15/1997	7.99		0.00	0.01	
06/16/1997	8.41	1.08	6.50	5.48	
06/17/1997	7.88		0.00	0.42	
06/18/1997	7.67		0.00	0.12	
06/19/1997	7.71		0.00	0.01	
06/20/1997	7.56		0.00	0.00	
06/21/1997	7.30	0.18	2.43	0.19	
06/22/1997	7.66		0.00	0.04	
06/23/1997	7.65		0.00	0.00	
06/24/1997	7.48		0.00	0.00	
06/25/1997	7.25	0.46	2.48	0.28	
06/26/1997	7.48		0.00	0.15	
06/27/1997	7.52		0.00	0.01	
06/28/1997	7.20		0.00	0.00	
06/29/1997	7.31		0.00	0.00	
06/30/1997	8.44	2.07	6.93	9.32	
07/01/1997	7.94		0.00	0.83	
07/02/1997	7.86		0.00	0.21	
07/03/1997	7.74		0.00	0.02	
07/04/1997	7.44		0.00	0.00	
07/05/1997	7.40		0.00	0.00	
07/06/1997	7.77	0.62	4.81	4.40	
07/07/1997	7.21		0.00	0.62	
07/08/1997	6.35	0.08	1.06	0.23	
07/09/1997	5.75		0.00	0.06	
07/10/1997	7.29		0.16	0.01	
07/11/1997	7.91		0.01	0.00	
07/12/1997	7.80		0.00	0.00	

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
07/13/1997	7.66		0.00	0.00	
07/14/1997	6.49	0.02	0.00	0.00	
07/15/1997	7.34		0.00	0.00	
07/16/1997	7.43		0.00	0.00	
07/17/1997	7.73		0.00	0.00	
07/18/1997	7.46	0.54	3.16	1.16	
07/19/1997	7.72		0.00	0.48	
07/20/1997	7.74		1.21	0.10	
07/21/1997	7.95	0.47	6.03	1.00	
07/22/1997	7.74	0.05	0.01	0.46	
07/23/1997	7.78	1.58	7.00	6.82	
07/24/1997	7.96		0.00	0.51	
07/25/1997	7.22		0.00	0.11	
07/26/1997	7.44	0.07	0.00	0.03	
07/27/1997	7.45	0.16	2.30	0.35	
07/28/1997	7.39		0.00	0.14	
07/29/1997	6.48		0.03	0.01	
07/30/1997	7.21		0.25	0.00	
07/31/1997	7.75		0.00	0.00	
08/01/1997	7.48		0.00	0.00	
08/02/1997	7.05		0.00	0.00	
08/03/1997	7.12		0.00	0.00	
08/04/1997	7.51		0.00	0.00	
08/05/1997	6.94		0.00	0.00	
08/06/1997	6.86		0.00	0.00	
08/07/1997	7.12		0.00	0.00	
08/08/1997	6.79		0.00	0.00	
08/09/1997	7.73		0.00	0.00	
08/10/1997	7.34		0.00	0.00	
08/11/1997	7.39		7.00	1.10	
08/12/1997	8.72		19.00	10.24	
08/13/1997	7.58		0.00	0.68	
08/14/1997	7.61		0.00	0.43	
08/15/1997	7.54		0.00	0.34	
08/16/1997	8.34		7.00	9.27	
08/17/1997	7.59		10.00	2.63	
08/18/1997	7.33		0.00	0.28	
08/19/1997	7.56		0.00	0.05	
08/20/1997	7.49		1.00	0.05	
08/21/1997	8.09		3.00	0.55	
08/22/1997	7.52		0.00	0.61	
08/23/1997	8.01		0.00	0.42	
08/24/1997	7.95		5.00	2.06	
08/25/1997	7.46		0.00	0.24	
08/26/1997	7.50		0.00	0.03	
08/27/1997	7.73		0.00	0.00	
08/28/1997	7.93		0.00	0.00	
08/29/1997	6.40		0.00	0.00	
08/30/1997	4.99		0.00	0.00	
08/31/1997	4.38		0.00	0.00	
09/01/1997	4.60		0.00	0.00	
09/02/1997	6.47		0.00	0.00	
09/03/1997	7.54		0.00	0.00	
09/04/1997	7.28		0.00	0.00	
09/05/1997	6.98		0.00	0.00	
09/06/1997	7.10		0.00	0.00	

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
09/07/1997	6.87		0.00	0.00	
09/08/1997	6.58	0.14	0.00	0.00	
09/09/1997	7.01		0.00	0.00	
09/10/1997	7.26	0.18	0.96	0.00	
09/11/1997	7.97		0.00	0.03	
09/12/1997	8.24		0.00	0.13	
09/13/1997	6.86		0.00	0.19	
09/14/1997	7.37		0.00	0.20	
09/15/1997	7.52		0.00	0.24	
09/16/1997	7.80		3.90	0.46	
09/17/1997	7.01	0.65	1.98	1.21	
09/18/1997	7.40		0.00	0.54	
09/19/1997	6.49	0.63	4.66	1.42	
09/20/1997	6.47		0.00	0.28	
09/21/1997	6.96		0.00	0.01	
09/22/1997	7.15	0.05	0.31	0.04	
09/23/1997	5.78	0.21	0.00	0.20	
09/24/1997	4.90		0.00	0.25	
09/25/1997	4.87		0.00	0.27	
09/26/1997	4.65		0.00	0.25	
09/27/1997	4.52		0.00	0.25	
09/28/1997	4.52	0.08	0.00	0.31	
09/29/1997	4.71		0.00	0.30	
09/30/1997	5.04	0.19	1.51	0.29	
10/01/1997	4.53	0.02	0.00	0.29	
10/02/1997	4.72		0.00	0.24	
10/03/1997	4.58		0.00	0.22	
10/04/1997	4.13	0.11	0.00	0.29	
10/05/1997	4.34		0.00	0.37	
10/06/1997	4.52		0.00	0.28	
10/07/1997	4.41		0.00	0.25	
10/08/1997	4.49		0.00	0.23	
10/09/1997	4.82	0.27	2.06	0.35	
10/10/1997	4.36		0.00	0.22	
10/11/1997	4.19		0.00	0.15	
10/12/1997	4.18		0.00	0.14	
10/13/1997	5.75	0.40	2.95	0.23	
10/14/1997	4.33		0.00	0.05	
10/15/1997	4.32		0.00	0.00	
10/16/1997	5.73		0.00	0.00	
10/17/1997	5.93		0.00	0.00	
10/18/1997	6.05		0.00	0.00	
10/19/1997	5.75		0.00	0.00	
10/20/1997	6.52		0.00	0.00	
10/21/1997	7.25		0.00	0.00	
10/22/1997	6.16	0.05	0.00	0.00	
10/23/1997	6.59	0.05	1.31	0.00	
10/24/1997	5.49	0.25	0.00	0.00	
10/25/1997	5.91	0.02	0.00	0.00	
10/26/1997	7.84	0.75	12.05	0.98	
10/27/1997	6.21	0.11	1.66	0.64	
10/28/1997	6.64		0.00	0.24	
10/29/1997	4.84		0.00	0.01	
10/30/1997	4.84		0.00	0.00	
10/31/1997	5.78		0.00	0.00	
11/01/1997	5.99	0.25	2.30	0.00	

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
11/02/1997	5.95	0.06	0.00	0.00	
11/03/1997	5.77	0.05	0.00	0.00	
11/04/1997	5.25		0.00	0.00	
11/05/1997	5.64	0.03	0.00	0.00	
11/06/1997	5.69	0.03	0.00	0.00	
11/07/1997	5.29		0.00	0.00	
11/08/1997	4.79		0.00	0.00	
11/09/1997	4.90	0.01	0.00	0.00	
11/10/1997	5.56	0.19	0.00	0.00	
11/11/1997	5.29	0.04	0.00	0.00	
11/12/1997	4.94		0.00	0.00	
11/13/1997	4.90	0.05	0.00	0.00	
11/14/1997	5.06	0.15	0.00	0.00	
11/15/1997	5.53	0.71	0.00	0.00	
11/16/1997	5.61	0.04	0.00	0.00	
11/17/1997	5.02		0.00	0.00	
11/18/1997	5.60		0.00	0.00	
11/19/1997	4.87		0.00	0.00	
11/20/1997	5.51		0.00	0.00	
11/21/1997	6.29		0.00	0.00	
11/22/1997	5.25		0.00	0.00	
11/23/1997	5.16		0.00	0.00	
11/24/1997	3.74		0.00	0.00	
11/25/1997	4.88		0.00	0.00	
11/26/1997	5.01		0.06	0.00	
11/27/1997	5.61	1.00	3.25	0.61	
11/28/1997	5.72	0.26	0.93	0.50	
11/29/1997	6.03	0.24	3.70	0.29	
11/30/1997	5.81		0.00	0.04	
12/01/1997	4.45		0.00	0.00	
12/02/1997	4.93		1.35	0.00	
12/03/1997	4.79	0.03	0.00	0.00	
12/04/1997	5.27	0.01	0.00	0.00	
12/05/1997	5.25	0.19	0.00	0.00	
12/06/1997	5.13	0.01	0.00	0.00	
12/07/1997	4.63		0.00	0.00	
12/08/1997	4.07	0.04	0.00	0.00	
12/09/1997	5.09	0.17	0.00	0.00	
12/10/1997	6.16	0.86	0.00	0.00	
12/11/1997	5.75		0.00	0.00	
12/12/1997	5.64	0.04	0.00	0.00	
12/13/1997	4.92		0.00	0.00	
12/14/1997	4.74		0.00	0.00	
12/15/1997	3.92		0.00	0.00	
12/16/1997	4.74		0.00	0.00	
12/17/1997	4.55		0.00	0.00	
12/18/1997	5.01		0.00	0.00	
12/19/1997	6.39		0.00	0.00	
12/20/1997	5.92	0.10	0.10	0.00	
12/21/1997	5.78		0.00	0.00	
12/22/1997	6.96	0.38	6.71	0.19	
12/23/1997	6.71	0.03	0.00	0.06	
12/24/1997	7.27	0.43	6.19	0.64	
12/25/1997	7.08	0.05	0.00	0.31	
12/26/1997	6.64		0.00	0.03	
12/27/1997	6.43	0.01	0.00	0.00	

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
12/28/1997	6.22		0.00	0.00	
12/29/1997	5.83	0.08	0.00	0.00	
12/30/1997	5.50	0.77	0.00	0.00	
12/31/1997	4.96	0.36	0.00	0.00	
01/01/1998	5.07		0.00	0.00	
01/02/1998	8.16		13.31	0.04	
01/03/1998	8.49	0.34	10.00	1.46	
01/04/1998	8.44	0.61	12.25	1.71	
01/05/1998	8.35	0.73	10.41	4.07	
01/06/1998	8.15	0.11	1.93	0.50	
01/07/1998	8.43	0.41	11.83	1.03	
01/08/1998	9.07	0.57	18.11	5.37	
01/09/1998	7.75	0.09	0.00	0.45	
01/10/1998	6.11		0.00	0.02	
01/11/1998	5.67		0.00	0.00	
01/12/1998	5.50	0.03	0.00	0.00	
01/13/1998	5.02	0.03	0.00	0.00	
01/14/1998	4.91	0.16	0.00	0.00	
01/15/1998	5.25		0.00	0.00	
01/16/1998	4.92		0.00	0.00	
01/17/1998	4.60		0.00	0.00	
01/18/1998	4.57		0.00	0.00	
01/19/1998	4.80		0.00	0.00	
01/20/1998	5.96		0.00	0.00	
01/21/1998	6.01	0.01	0.00	0.00	
01/22/1998	6.23	0.11	0.00	0.00	
01/23/1998	6.16	0.07	0.00	0.00	
01/24/1998	5.93		0.00	0.00	
01/25/1998	5.83		0.00	0.00	
01/26/1998	6.17		0.00	0.00	
01/27/1998	6.66		0.23	0.00	
01/28/1998	7.05		0.00	0.00	
01/29/1998	7.08	0.11	2.01	0.00	
01/30/1998	5.84		0.00	0.00	
01/31/1998	4.85		0.00	0.00	
02/01/1998	4.86		0.00	0.00	
02/02/1998	5.97		0.00	0.00	
02/03/1998	6.40		0.00	0.00	
02/04/1998	6.58		0.00	0.00	
02/05/1998	6.63		0.00	0.00	
02/06/1998	6.36		0.00	0.00	
02/07/1998	6.23		0.00	0.00	
02/08/1998	6.00		0.00	0.00	
02/09/1998	6.96		0.00	0.00	
02/10/1998	7.32	0.14	0.31	0.00	
02/11/1998	8.51	0.85	14.03	0.03	
02/12/1998	8.06	0.03	0.00	0.00	
02/13/1998	7.61		0.00	0.00	
02/14/1998	6.96		0.00	0.00	
02/15/1998	6.72		0.00	0.00	
02/16/1998	6.65	0.18	2.83	0.00	
02/17/1998	8.12	0.34	7.21	0.00	
02/18/1998	7.24	0.20	0.00	0.00	
02/19/1998	7.04	0.09	0.00	0.00	
02/20/1998	6.74	0.04	0.00	0.00	
02/21/1998	7.32		0.00	0.00	

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
02/22/1998	7.48		0.00	0.00	
02/23/1998	7.34		1.48	0.00	
02/24/1998	7.49	0.12	0.00	0.00	
02/25/1998	7.06		0.00	0.00	
02/26/1998	7.51	0.01	2.83	0.00	
02/27/1998	7.37	0.19	0.95	0.00	
02/28/1998	6.99	0.09	0.83	0.00	
03/01/1998	7.73		0.00	0.00	
03/02/1998	7.54		0.00	0.00	
03/03/1998	7.40	0.11	0.00	0.00	
03/04/1998	7.62	0.03	0.00	0.00	
03/05/1998	7.68	0.01	0.00	0.00	
03/06/1998	7.31	0.01	0.00	0.00	
03/07/1998	6.68		0.00	0.00	
03/08/1998	8.57	1.08	16.66	1.38	
03/09/1998	8.06	0.80	3.68	3.49	
03/10/1998	7.87	0.06	0.00	0.34	
03/11/1998	7.58	0.22	0.00	0.00	
03/12/1998	7.62		0.00	0.00	
03/13/1998	7.69		0.00	0.00	
03/14/1998	7.47		0.00	0.00	
03/15/1998	7.28	0.01	0.00	0.00	
03/16/1998	7.56		0.00	0.00	
03/17/1998	8.95	0.33	15.85	0.00	
03/18/1998	9.20	0.17	11.69	0.23	
03/19/1998	8.45	0.04	0.00	0.10	
03/20/1998	8.37	0.35	4.94	0.19	
03/21/1998	8.72		9.56	0.91	
03/22/1998	8.31		1.60	0.56	
03/23/1998	8.27		0.00	0.07	
03/24/1998	7.74		0.00	0.00	
03/25/1998	8.09		0.00	0.00	
03/26/1998	8.11		0.00	0.00	
03/27/1998	8.26		3.03	0.00	
03/28/1998	8.76	0.80	7.96	3.54	
03/29/1998	8.27	0.01	0.00	0.38	
03/30/1998	7.94		0.00	0.03	
03/31/1998	8.44	0.49	9.56	2.45	
04/01/1998	8.65	0.22	6.21	1.43	
04/02/1998	8.45		0.00	0.45	
04/03/1998	8.20		0.01	0.02	
04/04/1998	7.95		0.00	0.00	
04/05/1998	8.41		0.00	0.00	
04/06/1998	7.88		0.00	0.00	
04/07/1998	8.07	0.08	4.15	0.00	
04/08/1998	8.23	0.12	0.00	0.00	
04/09/1998	8.81	0.48	10.60	0.31	
04/10/1998	8.61		0.00	0.09	
04/11/1998	8.09		0.00	0.00	
04/12/1998	8.32		0.00	0.00	
04/13/1998	8.88	0.85	12.08	2.90	
04/14/1998	9.00	0.14	0.00	2.66	
04/15/1998	8.96		0.00	0.78	
04/16/1998	8.58	0.05	0.00	0.39	
04/17/1998	8.36		0.00	0.01	
04/18/1998	8.27		0.00	0.00	

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
04/19/1998	7.99		0.00	0.00	
04/20/1998	8.79	0.29	5.08	0.00	
04/21/1998	8.77	0.35	7.03	0.24	
04/22/1998	8.67		0.00	0.06	
04/23/1998	8.73		0.00	0.00	
04/24/1998	8.44		0.00	0.00	
04/25/1998	8.43	0.09	0.83	0.00	
04/26/1998	8.72	0.05	0.00	0.00	
04/27/1998	8.08		0.00	0.00	
04/28/1998	8.78		3.34	0.00	
04/29/1998	8.10	0.38	0.13	0.00	
04/30/1998	8.61	0.08	0.00	0.00	
05/01/1998	6.10	0.02	0.00	0.00	
05/02/1998	8.07		0.00	0.00	
05/03/1998	7.90	0.05	0.00	0.00	
05/04/1998	7.94	0.06	0.00	0.00	
05/05/1998	8.18	0.08	0.00	0.00	
05/06/1998	8.51	0.07	0.00	0.00	
05/07/1998	9.16	1.02	12.81	0.16	
05/08/1998	8.82	0.02	2.06	1.11	
05/09/1998	8.45		0.00	0.15	
05/10/1998	8.39		0.00	0.00	
05/11/1998	8.49		0.00	0.00	
05/12/1998	8.17	0.03	0.00	0.00	
05/13/1998	7.91	0.05	0.00	0.00	
05/14/1998	7.71		0.00	0.00	
05/15/1998	8.25		0.00	0.00	
05/16/1998	7.80		0.00	0.00	
05/17/1998	8.00		0.00	0.00	
05/18/1998	8.04		0.00	0.00	
05/19/1998	7.90	0.11	0.98	0.00	
05/20/1998	8.36		0.00	0.00	
05/21/1998	7.97		0.00	0.00	
05/22/1998	8.03		0.00	0.00	
05/23/1998	8.07		0.00	0.00	
05/24/1998	7.72	0.52	4.01	0.00	
05/25/1998	7.81		0.00	0.00	
05/26/1998	8.01		0.00	0.00	
05/27/1998	7.71		0.00	0.00	
05/28/1998	8.64		0.00	0.00	
05/29/1998	7.67	0.07	0.00	0.00	
05/30/1998	7.33		0.00	0.00	
05/31/1998	7.21		0.00	0.00	
06/01/1998	7.69		0.00	0.00	
06/02/1998	7.92		0.00	0.00	
06/03/1998	7.77	0.12	0.00	0.00	
06/04/1998	8.23		0.00	0.00	
06/05/1998	7.63	0.11	0.00	0.00	
06/06/1998	7.69		0.00	0.00	
06/07/1998	7.70		0.00	0.00	
06/08/1998	8.02	0.06	0.00	0.00	
06/09/1998	8.25	0.45	6.86	0.00	
06/10/1998	7.91		0.01	0.00	
06/11/1998	8.97	1.54	17.48	6.02	
06/12/1998	8.47	0.03	1.96	2.17	
06/13/1998	7.53		0.00	0.44	

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
06/14/1998	7.57		0.00	0.01	
06/15/1998	8.23		0.00	0.00	
06/16/1998	7.66		0.00	0.00	
06/17/1998	7.83		0.00	0.00	
06/18/1998	7.88	0.50	0.98	0.00	
06/19/1998	7.53	0.05	2.63	0.00	
06/20/1998	7.58		0.00	0.00	
06/21/1998	7.59		0.00	0.03	
06/22/1998	8.33		0.00	0.00	
06/23/1998	7.32		0.00	0.00	
06/24/1998	7.90		0.00	0.00	
06/25/1998	7.86		0.00	0.08	
06/26/1998	7.77	0.30	1.90	0.00	
06/27/1998	7.37		0.00	0.00	
06/28/1998	7.76	0.02	0.00	0.00	
06/29/1998	8.14	0.37	3.05	0.00	
06/30/1998	7.79		0.03	0.00	
07/01/1998	7.85		0.00	0.00	
07/02/1998	8.30		0.00	0.00	
07/03/1998	7.68	2.05	2.76	1.20	
07/04/1998	7.89		4.91	5.34	
07/05/1998	7.90		0.00	0.13	
07/06/1998	8.11		0.00	0.00	
07/07/1998	8.67	1.20	8.89	6.95	
07/08/1998	8.56		0.00	0.66	
07/09/1998	8.32		0.00	0.00	
07/10/1998	7.83		0.00	0.00	
07/11/1998	7.81		0.00	0.00	
07/12/1998	8.53		0.00	0.00	
07/13/1998	8.49		0.00	0.00	
07/14/1998	7.19		0.00	0.00	
07/15/1998	8.01		0.00	0.00	
07/16/1998	8.22		0.00	0.00	
07/17/1998	7.46		0.00	0.00	
07/18/1998	7.52		0.00	0.00	
07/19/1998	6.67	0.16	1.01	0.00	
07/20/1998	7.70		0.00	0.00	
07/21/1998	7.54		0.00	0.00	
07/22/1998	7.25	0.60	2.41	0.00	
07/23/1998	8.25		0.00	0.00	
07/24/1998	8.03		0.00	0.00	
07/25/1998	7.66		0.00	0.00	
07/26/1998	7.79		0.00	0.00	
07/27/1998	7.83		0.00	0.00	
07/28/1998	5.81		0.00	0.00	
07/29/1998	6.08		0.00	0.00	
07/30/1998	6.50		0.00	0.00	
07/31/1998	7.08		0.00	0.00	
08/01/1998	8.05		0.00	0.00	
08/02/1998	5.88		0.00	0.00	
08/03/1998	6.01	0.14	1.63	0.00	
08/04/1998	8.39	1.23	9.76	0.00	
08/05/1998	8.04	0.60	3.01	0.07	
08/06/1998	7.86		1.93	0.40	
08/07/1998	7.18	0.13	0.01	0.00	
08/08/1998	7.27	0.08	1.05	0.00	

LaPorte CSO Overflow Data					
Date	**Plant Influent Flow MGD**	**Rain inches**	**Bypass to CSO Lagoon hours**	**CSO Lagoon Overflow MGD**	**CSO Lagoon Return Pump MGD**
08/09/1998	8.66	1.41	10.18	6.38	
08/10/1998	8.47		0.60	1.55	
08/11/1998	8.34		0.00	0.01	
08/12/1998	8.42		0.00	0.00	
08/13/1998	8.38		0.00	0.00	
08/14/1998	8.07		0.00	0.00	
08/15/1998	7.87		0.00	0.00	
08/16/1998	7.59		0.00	0.00	
08/17/1998	8.25		0.00	0.00	
08/18/1998	8.15		0.00	0.00	
08/19/1998	8.18		0.00	0.00	
08/20/1998	7.21		0.00	0.00	
08/21/1998	7.13		0.00	0.00	
08/22/1998	7.04	0.43	2.65	0.00	
08/23/1998	6.90		4.11	0.00	
08/24/1998	7.56	0.25	2.01	0.00	
08/25/1998	7.93	0.41	2.43	0.00	
08/26/1998	8.07		0.05	0.00	2.00
08/27/1998	8.35		0.00	0.00	1.00
08/28/1998	7.88	0.14	0.00	0.00	2.00
08/29/1998	8.01		0.00	0.00	2.00
08/30/1998	7.29		0.00	0.00	1.57
08/31/1998	7.14		0.00	0.00	0.40
09/01/1998	7.68		0.00	0.00	0.43
09/02/1998	8.46		0.00	0.00	1.17
09/03/1998	7.96	0.05	0.00	0.00	0.96
09/04/1998	7.86		0.00	0.00	0.69
09/05/1998	6.61		0.00	0.00	0.00
09/06/1998	6.57	0.02	0.00	0.00	0.00
09/07/1998	6.35	0.11	1.25	0.00	0.14
09/08/1998	5.15	0.05	0.00	0.00	0.00
09/09/1998	5.10		0.00	0.00	0.00
09/10/1998	6.40		0.00	0.00	1.25
09/11/1998	6.30		0.00	0.00	1.91
09/12/1998	4.80		0.00	0.00	0.92
09/13/1998	3.90		0.00	0.00	0.00
09/14/1998	4.32		0.00	0.00	0.44
09/15/1998	4.17	0.12	0.00	0.00	0.01
09/16/1998	4.80		0.00	0.00	0.00
09/17/1998	4.15		0.00	0.00	0.00
09/18/1998	3.88		0.00	0.00	0.00
09/19/1998	5.36		0.00	0.00	1.73
09/20/1998	5.85	0.45	3.50	0.00	1.33
09/21/1998	6.08	0.01	0.00	0.00	1.81
09/22/1998	5.94		0.00	0.00	1.75
09/23/1998	4.68		0.00	0.00	0.47
09/24/1998	4.20	0.03	0.00	0.00	0.00
09/25/1998	4.17		0.00	0.00	0.41
09/26/1998	4.53		0.00	0.00	0.82
09/27/1998	3.71		0.00	0.00	0.27
09/28/1998	3.70		0.00	0.00	0.00
09/29/1998	4.53		0.00	0.00	0.51
09/30/1998	6.39	0.36	2.56	0.00	1.16
10/01/1998	6.36		0.00	0.00	1.79
10/02/1998	6.69	0.46	4.98	0.00	1.34
10/03/1998	5.05	0.05	0.00	0.00	1.16

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
10/04/1998	5.11		0.00	0.00	1.60
10/05/1998	5.07	0.17	0.00	0.00	0.60
10/06/1998	6.74	0.65	8.61	0.00	0.01
10/07/1998	6.94	0.04	0.00	0.00	2.08
10/08/1998	6.67	0.07	0.00	0.00	1.87
10/09/1998	5.89		0.00	0.00	1.54
10/10/1998	4.21		0.00	0.00	0.00
10/11/1998	4.05		0.00	0.00	0.00
10/12/1998	4.42		0.00	0.00	0.09
10/13/1998	5.09		0.00	0.00	0.81
10/14/1998	5.68		0.00	0.00	1.47
10/15/1998	5.75		0.00	0.00	1.25
10/16/1998	5.06		0.00	0.00	0.71
10/17/1998	4.34	0.07	0.00	0.00	0.00
10/18/1998	5.17	0.27	2.48	0.00	0.00
10/19/1998	4.92		0.00	0.00	0.49
10/20/1998	4.87		0.00	0.00	0.44
10/21/1998	4.18	0.01	0.00	0.00	0.00
10/22/1998	5.50	0.04	0.00	0.00	1.31
10/23/1998	4.02		0.00	0.00	0.11
10/24/1998	3.52		0.00	0.00	0.10
10/25/1998	5.14		0.00	0.00	1.84
10/26/1998	3.58		0.00	0.00	0.00
10/27/1998	3.87	0.04	0.00	0.00	0.05
10/28/1998	5.27	0.01	0.00	0.00	0.88
10/29/1998	5.55	0.27	2.50	0.00	0.25
10/30/1998	6.58	0.10	0.13	0.00	1.86
10/31/1998	5.28	0.02	0.00	0.00	1.20
11/01/1998	5.18	0.01	0.00	0.00	1.19
11/02/1998	4.21		0.00	0.00	0.02
11/03/1998	4.22		0.00	0.00	0.14
11/04/1998	4.59		0.00	0.00	0.39
11/05/1998	5.60	0.05	0.00	0.00	1.15
11/06/1998	5.14	0.07	0.00	0.00	0.00
11/07/1998	5.52		0.00	0.00	0.08
11/08/1998	6.63	0.11	0.00	0.00	1.11
11/09/1998	6.22	0.65	1.95	0.00	0.27
11/10/1998	8.79	0.47	11.10	0.00	0.81
11/11/1998	8.21		0.00	0.00	2.45
11/12/1998	8.28	0.05	0.00	0.00	2.44
11/13/1998	8.08		0.00	0.00	2.52
11/14/1998	5.60		0.00	0.00	0.23
11/15/1998	5.16		0.00	0.00	0.00
11/16/1998	6.34		0.00	0.00	0.88
11/17/1998	5.29	0.01	0.00	0.00	0.00
11/18/1998	5.86		0.00	0.00	0.00
11/19/1998	5.78		0.00	0.00	0.00
11/20/1998	5.44		0.00	0.00	0.00
11/21/1998	6.52		0.00	0.00	1.14
11/22/1998	5.27		0.00	0.00	0.00
11/23/1998	5.62		0.00	0.00	0.00
11/24/1998	5.61		0.00	0.00	0.00
11/25/1998	6.15	0.02	0.00	0.00	0.70
11/26/1998	5.12		0.00	0.00	0.00
11/27/1998	5.47		0.00	0.00	0.51
11/28/1998	5.31		0.00	0.00	0.24

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
11/29/1998	5.67		0.00	0.00	0.52
11/30/1998	6.18	0.17	1.56	0.00	0.00
12/01/1998	5.23		0.00	0.00	0.00
12/02/1998	5.93		0.00	0.00	0.49
12/03/1998	6.21		0.00	0.00	0.52
12/04/1998	5.53	0.01	0.00	0.00	0.00
12/05/1998	5.65		0.00	0.00	0.32
12/06/1998	7.52	1.27	9.60	0.02	0.88
12/07/1998	8.51	0.02	0.00	0.03	2.08
12/08/1998	8.21	0.01	0.00	0.00	2.58
12/09/1998	8.06		0.00	0.00	2.43
12/10/1998	7.31		0.00	0.00	1.24
12/11/1998	6.94		0.00	0.00	1.24
12/12/1998	5.58		0.00	0.00	0.64
12/13/1998	4.89		0.00	0.00	0.00
12/14/1998	5.15		0.00	0.00	0.13
12/15/1998	4.45		0.00	0.00	0.00
12/16/1998	4.42	0.13	0.00	0.00	0.00
12/17/1998	4.91		0.00	0.00	0.90
12/18/1998	3.86		0.00	0.00	0.44
12/19/1998	4.64	0.38	2.83	0.00	0.00
12/20/1998	3.68	0.06	0.00	0.00	0.61
12/21/1998	4.99	0.16	0.00	0.00	0.77
12/22/1998	3.31	0.01	0.00	0.00	0.00
12/23/1998	3.79		0.00	0.00	0.34
12/24/1998	3.83		0.00	0.00	0.50
12/25/1998	2.84		0.00	0.00	0.00
12/26/1998	3.03		0.00	0.00	0.00
12/27/1998	3.10		0.00	0.00	0.00
12/28/1998	4.78		0.00	0.00	1.47
12/29/1998	5.71	0.18	0.00	0.00	2.32
12/30/1998	3.55	0.11	0.00	0.00	0.20
12/31/1998	3.36	0.03	0.00	0.00	0.00
01/01/1999	3.09	0.25	0.00	0.00	0.00
01/02/1999	3.35	0.54	0.00	0.00	0.00
01/03/1999	3.09	0.13	0.00	0.00	0.00
01/04/1999	3.37		0.00	0.00	0.00
01/05/1999	3.33	0.06	0.00	0.00	0.00
01/06/1999	4.63	0.14	0.00	0.00	0.93
01/07/1999	4.86		0.00	0.00	1.03
01/08/1999	4.55	0.04	0.00	0.00	0.91
01/09/1999	4.57	0.31	0.00	0.00	1.06
01/10/1999	4.49	0.06	0.00	0.00	1.06
01/11/1999	3.97	0.21	0.00	0.00	0.35
01/12/1999	3.82	0.06	0.00	0.00	0.00
01/13/1999	4.13		0.00	0.00	0.00
01/14/1999	4.15		0.00	0.00	0.00
01/15/1999	4.00	0.01	0.00	0.00	0.00
01/16/1999	4.44		0.00	0.00	0.00
01/17/1999	5.45	0.76	5.66	0.00	0.00
01/18/1999	6.78	0.01	3.71	0.00	0.75
01/19/1999	5.07	0.19	0.00	0.00	1.07
01/20/1999	4.91		0.00	0.00	1.06
01/21/1999	6.15	0.74	1.46	0.00	1.03
01/22/1999	8.87	0.53	12.45	1.71	0.42
01/23/1999	8.25	0.18	9.70	0.90	0.38

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
01/24/1999	5.42		0.00	0.24	1.12
01/25/1999	5.41	0.05	0.00	0.00	1.12
01/26/1999	5.25		0.00	0.00	1.12
01/27/1999	5.87		0.00	0.00	1.12
01/28/1999	5.18		0.00	0.00	1.12
01/29/1999	5.09		0.00	0.00	1.16
01/30/1999	4.82		0.00	0.00	1.27
01/31/1999	4.47		0.00	0.00	1.26
02/01/1999	4.60	0.06	0.00	0.00	1.25
02/02/1999	5.97	0.24	2.01	0.00	1.13
02/03/1999	4.58		0.00	0.00	1.19
02/04/1999	4.21		0.00	0.00	0.73
02/05/1999	4.47		0.00	0.00	0.89
02/06/1999	3.39		0.00	0.00	0.16
02/07/1999	5.45	0.22	4.25	0.00	0.62
02/08/1999	5.61		0.13	0.00	1.10
02/09/1999	3.91		0.00	0.00	0.44
02/10/1999	3.86		0.00	0.00	0.55
02/11/1999	5.09	0.32	3.88	0.00	0.53
02/12/1999	4.68	0.10	0.00	0.00	1.22
02/13/1999	4.45	0.05	0.00	0.00	1.24
02/14/1999	4.12		0.00	0.00	1.15
02/15/1999	4.02		0.00	0.00	0.79
02/16/1999	4.97	0.36	1.21	0.00	0.68
02/17/1999	3.76		0.00	0.00	0.53
02/18/1999	3.75		0.00	0.00	0.50
02/19/1999	4.02		0.00	0.00	0.79
02/20/1999	3.22	0.04	0.00	0.00	0.19
02/21/1999	4.05		0.00	0.00	1.09
02/22/1999	3.16		0.00	0.00	0.00
02/23/1999	3.91	0.13	0.00	0.00	0.73
02/24/1999	3.80		0.00	0.00	0.51
02/25/1999	4.14	0.28	0.00	0.00	0.37
02/26/1999	3.47	0.05	0.46	0.00	0.01
02/27/1999	4.61	0.12	0.83	0.00	0.89
02/28/1999	3.76		0.00	0.00	0.33
03/01/1999	3.81		0.00	0.00	0.59
03/02/1999	5.28	0.32	2.65	0.00	0.65
03/03/1999	4.39	0.06	0.00	0.00	0.86
03/04/1999	3.97		0.00	0.00	0.56
03/05/1999	4.64	0.56	1.05	0.00	0.85
03/06/1999	4.83	0.11	0.00	0.00	0.52
03/07/1999	4.37		0.00	0.00	0.84
03/08/1999	4.77	0.31	0.00	0.00	1.05
03/09/1999	4.07	0.19	0.00	0.00	0.07
03/10/1999	5.10		0.00	0.00	0.75
03/11/1999	4.65		0.00	0.00	0.39
03/12/1999	4.88		0.00	0.00	0.55
03/13/1999	4.65		0.00	0.00	1.02
03/14/1999	3.68		0.00	0.00	0.29
03/15/1999	4.10		0.00	0.09	0.23
03/16/1999	4.83		0.00	0.00	0.00
03/17/1999	4.75		0.00	0.00	0.11
03/18/1999	5.09		0.00	0.00	1.23
03/19/1999	3.53		0.00	0.00	0.10
03/20/1999	3.29		0.00	0.00	0.00

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
03/21/1999	4.02		0.00	0.00	0.83
03/22/1999	3.44		0.36	0.00	0.13
03/23/1999	4.70		0.00	0.00	1.15
03/24/1999	3.74		0.00	0.00	0.12
03/25/1999	3.91		0.00	0.00	0.45
03/26/1999	4.21		0.00	0.00	0.92
03/27/1999	3.23		0.00	0.00	0.04
03/28/1999	3.30		0.00	0.00	0.17
03/29/1999	4.54		0.00	0.00	1.22
03/30/1999	3.70		0.00	0.00	0.38
03/31/1999	3.78		0.00	0.00	0.47
04/01/1999	3.84	0.04	0.00	0.00	0.52
04/02/1999	4.07		0.00	0.00	0.72
04/03/1999	3.64	0.11	0.00	0.00	0.09
04/04/1999	5.41	0.32	3.76	0.00	1.36
04/05/1999	5.04	0.01	0.00	0.00	1.97
04/06/1999	4.27	0.11	0.85	0.00	0.64
04/07/1999	3.35	0.26	0.00	0.00	0.28
04/08/1999	3.83	0.33	1.01	0.00	0.14
04/09/1999	7.32	0.21	6.20	0.00	1.62
04/10/1999	5.72	0.02	1.75	0.00	1.91
04/11/1999	5.75		0.76	0.00	1.75
04/12/1999	5.42		0.00	0.00	2.21
04/13/1999	5.35		0.00	0.00	2.16
04/14/1999	3.95		0.00	0.00	0.74
04/15/1999	5.51	0.85	7.35	0.00	0.33
04/16/1999	7.48	0.16	2.51	0.00	1.73
04/17/1999	5.56	0.06	0.00	0.00	2.27
04/18/1999	5.04	0.12	1.01	0.00	1.22
04/19/1999	4.78		0.00	0.00	1.08
04/20/1999	4.45	0.13	0.56	0.00	0.19
04/21/1999	5.20	0.09	0.66	0.00	0.99
04/22/1999	5.94	2.11	5.81	0.03	0.67
04/23/1999	8.75	0.57	7.35	6.36	1.02
04/24/1999	6.37		0.00	0.00	2.04
04/25/1999	4.96		0.00	0.00	1.26
04/26/1999	5.80		0.00	0.00	1.73
04/27/1999	6.67	0.33	4.18	0.00	1.68
04/28/1999	7.40	0.14	4.51	0.00	1.66
04/29/1999	6.15		0.00	0.00	2.01
04/30/1999	5.88		0.00	0.00	1.94
05/01/1999	5.67		0.00	0.00	1.88
05/02/1999	5.47		0.00	0.00	1.83
05/03/1999	5.79		0.00	0.00	1.91
05/04/1999	5.76		0.00	0.00	1.84
05/05/1999	4.99	0.01	0.00	0.00	1.08
05/06/1999	5.68	0.28	2.25	0.00	0.85
05/07/1999	5.89		0.00	0.00	2.00
05/08/1999	4.88	0.02	0.00	0.00	1.23
05/09/1999	3.42		0.00	0.00	0.00
05/10/1999	4.27		0.00	0.00	0.47
05/11/1999	4.34	0.01	0.00	0.00	0.55
05/12/1999	5.33		0.00	0.00	1.52
05/13/1999	5.46	0.02	0.00	0.00	1.58
05/14/1999	4.08		0.00	0.00	0.36
05/15/1999	4.38		0.00	0.00	0.79

LaPorte CSO Overflow Data					
Date	**Plant Influent Flow MGD**	**Rain inches**	**Bypass to CSO Lagoon hours**	**CSO Lagoon Overflow MGD**	**CSO Lagoon Return Pump MGD**
05/16/1999	3.61		0.00	0.00	0.13
05/17/1999	5.73	0.26	2.45	0.00	1.16
05/18/1999	5.51	0.06	0.00	0.00	1.79
05/19/1999	5.45		0.00	0.00	1.72
05/20/1999	5.23		0.00	0.00	1.44
05/21/1999	4.64		0.00	0.00	0.94
05/22/1999	4.59	0.11	0.00	0.00	0.93
05/23/1999	5.73	0.70	6.76	0.00	0.47
05/24/1999	5.33	0.06	0.00	0.00	1.48
05/25/1999	5.87		0.00	0.00	2.27
05/26/1999	5.74		0.00	0.00	2.06
05/27/1999	3.72		0.00	0.00	0.00
05/28/1999	4.78		0.00	0.00	1.21
05/29/1999	4.03		0.00	0.00	0.74
05/30/1999	4.09	0.10	0.00	0.00	0.65
05/31/1999	4.51	0.11	0.00	0.00	0.92
06/01/1999	4.80	0.32	0.00	0.00	0.93
06/02/1999	6.45	0.21	3.16	0.00	1.63
06/03/1999	5.71		0.00	0.00	2.09
06/04/1999	4.62		0.00	0.00	1.12
06/05/1999	3.92		0.00	0.00	0.62
06/06/1999	4.23		0.00	0.00	1.03
06/07/1999	4.04		0.00	0.00	0.52
06/08/1999	3.80		0.00	0.00	0.28
06/09/1999	4.83		0.00	0.00	1.25
06/10/1999	3.96		0.00	0.00	0.27
06/11/1999	4.47	0.04	0.00	0.00	0.90
06/12/1999	5.64	0.95	3.96	0.00	0.73
06/13/1999	4.77	0.34	1.75	0.00	0.87
06/14/1999	5.39		0.00	0.00	1.84
06/15/1999	5.62		0.00	0.00	2.23
06/16/1999	5.67		0.00	0.00	2.17
06/17/1999	4.78		0.00	0.00	1.24
06/18/1999	3.85		0.00	0.00	0.48
06/19/1999	3.90		0.00	0.00	0.77
06/20/1999	3.50		0.00	0.00	0.63
06/21/1999	4.47		0.00	0.00	1.31
06/22/1999	4.14		0.00	0.00	0.88
06/23/1999	3.36		0.00	0.00	0.03
06/24/1999	5.41	0.23	2.86	0.00	0.99
06/25/1999	5.55		0.00	0.00	2.07
06/26/1999	5.24	0.44	2.41	0.00	1.41
06/27/1999	6.95	0.85	5.33	0.00	1.56
06/28/1999	5.79	0.14	0.61	0.00	1.98
06/29/1999	5.60		0.00	0.00	2.18
06/30/1999	5.70		0.00	0.00	2.28
07/01/1999	7.92	1.99	7.58	2.78	1.31
07/02/1999	6.04		0.12	0.00	2.28
07/03/1999	5.67		0.00	0.00	2.19
07/04/1999	5.18		0.00	0.00	1.88
07/05/1999	5.24		0.00	0.00	1.86
07/06/1999	5.59		0.00	0.00	2.08
07/07/1999	5.48		0.00	0.00	2.06
07/08/1999	4.33		0.00	0.00	0.93
07/09/1999	4.39		0.00	0.00	0.86
07/10/1999	3.37		0.00	0.00	0.29

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
07/11/1999	2.96		0.00	0.00	0.00
07/12/1999	3.60		0.00	0.00	0.27
07/13/1999	4.22		0.00	0.00	0.92
07/14/1999	5.06		0.00	0.00	1.69
07/15/1999	3.67		0.00	0.00	0.18
07/16/1999	3.57		0.00	0.00	0.23
07/17/1999	4.53	0.15	1.06	0.00	0.90
07/18/1999	3.54		0.00	0.00	0.55
07/19/1999	3.71		0.00	0.00	0.47
07/20/1999	4.42	0.20	1.55	0.00	0.65
07/21/1999	4.65	0.03	0.00	0.00	1.24
07/22/1999	4.19		0.00	0.00	0.82
07/23/1999	6.25	0.57	3.66	0.00	1.38
07/24/1999	4.88		0.00	0.00	1.67
07/25/1999	4.08		0.00	0.00	1.09
07/26/1999	4.38		0.00	0.00	1.15
07/27/1999	4.41	0.05	0.00	0.00	1.03
07/28/1999	5.45	0.31	2.18	0.00	0.87
07/29/1999	4.78		0.00	0.00	1.21
07/30/1999	3.81		0.00	0.00	0.50
07/31/1999	4.34	0.92	3.33	0.00	0.26
08/01/1999	5.22		0.00	0.00	1.96
08/02/1999	5.26		0.10	0.00	2.09
08/03/1999	3.88		0.00	0.00	0.76
08/04/1999	4.24		0.00	0.00	0.99
08/05/1999	4.65		0.00	0.00	1.52
08/06/1999	4.36		0.00	0.00	1.30
08/07/1999	4.19	0.30	1.53	0.00	0.55
08/08/1999	3.73		0.00	0.00	0.44
08/09/1999	3.78	0.05	0.00	0.00	0.56
08/10/1999	3.59	0.11	0.00	0.00	0.03
08/11/1999	4.49		0.00	0.00	1.34
08/12/1999	4.61	0.27	1.65	0.00	0.38
08/13/1999	6.57	1.10	5.50	0.00	1.11
08/14/1999	4.83		0.00	0.00	1.72
08/15/1999	4.47		0.00	0.00	1.59
08/16/1999	4.58		0.00	0.00	1.43
08/17/1999	3.81		0.00	0.00	0.59
08/18/1999	3.63	0.03	0.00	0.00	0.36
08/19/1999	6.35	0.80	5.03	0.00	1.09
08/20/1999	4.79		0.00	0.00	1.64
08/21/1999	4.57		0.00	0.00	1.60
08/22/1999	4.30		0.00	0.00	1.41
08/23/1999	4.41	0.06	0.00	0.00	0.93
08/24/1999	6.41	1.04	8.68	0.00	0.45
08/25/1999	6.02	0.06	1.85	0.00	1.78
08/26/1999	5.56	0.09	0.00	0.00	2.10
08/27/1999	5.23		0.00	0.00	2.03
08/28/1999	4.86		0.00	0.00	1.82
08/29/1999	2.89		0.00	0.00	0.00
08/30/1999	3.78		0.00	0.00	0.73
08/31/1999	3.42		0.00	0.00	0.35
09/01/1999	3.61		0.00	0.00	0.51
09/02/1999	3.65		0.00	0.00	0.45
09/03/1999	3.39		0.00	0.00	0.28
09/04/1999	3.32		0.00	0.00	0.46

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
09/05/1999	3.05		0.00	0.00	0.36
09/06/1999	3.40		0.00	0.00	0.58
09/07/1999	3.40		0.00	0.00	0.42
09/08/1999	3.13		0.00	0.00	0.13
09/09/1999	3.36		0.00	0.00	0.23
09/10/1999	3.45		0.00	0.00	0.49
09/11/1999	3.26		0.00	0.00	0.58
09/12/1999	3.60	0.14	0.00	0.00	0.55
09/13/1999	3.34		0.00	0.00	0.28
09/14/1999	3.40		0.00	0.00	0.43
09/15/1999	3.97		0.00	0.00	1.09
09/16/1999	3.59		0.00	0.00	0.54
09/17/1999	2.98		0.00	0.00	0.07
09/18/1999	3.14		0.00	0.00	0.35
09/19/1999	3.19		0.00	0.00	0.40
09/20/1999	3.24	0.02	0.00	0.00	0.26
09/21/1999	3.14		0.00	0.00	0.25
09/22/1999	3.26		0.00	0.00	0.44
09/23/1999	3.08		0.00	0.00	0.12
09/24/1999	3.76		0.00	0.00	0.89
09/25/1999	2.83		0.00	0.00	0.09
09/26/1999	3.14		0.00	0.00	0.46
09/27/1999	3.09	0.02	0.00	0.00	0.18
09/28/1999	4.54	0.59	2.70	0.00	0.84
09/29/1999	6.15	0.22	2.11	0.00	1.71
09/30/1999	4.86		0.00	0.00	1.96
10/01/1999	3.10		0.00	0.00	0.29
10/02/1999	3.15	0.04	0.00	0.00	0.43
10/03/1999	5.06	0.80	7.00	0.00	0.35
10/04/1999	5.39	0.01	0.00	0.00	2.25
10/05/1999	4.93	0.01	0.00	0.00	2.26
10/06/1999	4.03		0.00	0.00	1.43
10/07/1999	3.25		0.00	0.00	0.30
10/08/1999	3.40	0.06	0.00	0.00	0.45
10/09/1999	3.71	0.01	0.00	0.00	1.06
10/10/1999	3.02		0.00	0.00	0.37
10/11/1999	3.11		0.00	0.00	0.46
10/12/1999	2.98		0.00	0.00	0.21
10/13/1999	3.38	0.06	0.00	0.00	0.07
10/14/1999	2.84		0.00	0.00	0.00
10/15/1999	2.72		0.00	0.00	0.00
10/16/1999	2.68	0.01	0.00	0.00	0.00
10/17/1999	2.55	0.01	0.00	0.00	0.00
10/18/1999	2.70	0.01	0.00	0.00	0.00
10/19/1999	2.72	0.03	0.00	0.00	0.00
10/20/1999	2.76		0.00	0.00	0.00
10/21/1999	2.86		0.00	0.00	0.00
10/22/1999	2.74	0.01	0.00	0.00	0.00
10/23/1999	3.23	0.12	0.00	0.00	0.00
10/24/1999	2.96	0.05	0.00	0.00	0.00
10/25/1999	2.78		0.00	0.00	0.00
10/26/1999	2.72		0.00	0.00	0.00
10/27/1999	2.73		0.00	0.00	0.00
10/28/1999	2.73		0.00	0.00	0.00
10/29/1999	2.72		0.00	0.00	0.00
10/30/1999	2.55		0.00	0.00	0.00

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
10/31/1999	2.50		0.00	0.00	0.00
11/01/1999	3.80	0.78	3.88	0.00	0.00
11/02/1999	4.46	0.16	0.00	0.00	0.98
11/03/1999	2.87	0.01	0.00	0.00	0.20
11/04/1999	2.72		0.00	0.00	0.00
11/05/1999	2.58		0.00	0.00	0.00
11/06/1999	2.47		0.00	0.00	0.00
11/07/1999	2.44		0.00	0.00	0.00
11/08/1999	2.66		0.00	0.00	0.00
11/09/1999	2.68		0.00	0.00	0.00
11/10/1999	2.67		0.00	0.00	0.00
11/11/1999	2.73		0.00	0.00	0.00
11/12/1999	2.64		0.00	0.00	0.00
11/13/1999	2.52		0.00	0.00	0.00
11/14/1999	2.46		0.00	0.00	0.00
11/15/1999	2.63		0.00	0.00	0.01
11/16/1999	3.69		0.00	0.00	1.16
11/17/1999	4.49		0.00	0.00	1.91
11/18/1999	4.56		0.00	0.00	1.84
11/19/1999	5.92	0.28	3.11	0.00	2.13
11/20/1999	4.01		0.00	0.00	1.54
11/21/1999	2.74		0.00	0.00	0.34
11/22/1999	3.84	0.05	0.00	0.00	1.21
11/23/1999	4.18	0.47	2.45	0.00	0.14
11/24/1999	4.21		0.00	0.00	1.46
11/25/1999	3.34		0.00	0.00	0.87
11/26/1999	3.63		0.00	0.00	1.25
11/27/1999	2.85	0.02	0.00	0.00	0.38
11/28/1999	2.82		0.00	0.00	0.33
11/29/1999	2.93	0.01	0.00	0.00	0.31
11/30/1999	3.11		0.00	0.00	0.50
12/01/1999	2.61		0.00	0.00	0.00
12/02/1999	2.75		0.00	0.00	0.00
12/03/1999	5.36	0.37	2.86	0.00	0.88
12/04/1999	3.62	0.08	0.00	0.00	0.52
12/05/1999	7.00	1.05	8.53	0.00	0.85
12/06/1999	5.07		0.00	0.00	2.39
12/07/1999	5.04		0.00	0.00	2.47
12/08/1999	4.37		0.00	0.00	1.71
12/09/1999	3.45	0.13	0.00	0.00	0.35
12/10/1999	3.08		0.00	0.00	0.30
12/11/1999	3.57		0.00	0.00	1.11
12/12/1999	2.94	0.09	0.00	0.00	0.34
12/13/1999	3.04		0.00	0.00	0.30
12/14/1999	7.25	1.08	6.81	0.00	1.05
12/15/1999	7.18	0.35	2.73	0.00	1.78
12/16/1999	5.50	0.03	0.00	0.00	2.35
12/17/1999	3.15	0.04	0.00	0.00	0.94
12/18/1999	3.52		0.00	0.00	0.85
12/19/1999	3.06	0.02	0.00	0.00	0.39
12/20/1999	3.18	0.04	0.00	0.00	0.32
12/21/1999	3.59		0.00	0.00	0.90
12/22/1999	3.11	0.03	0.00	0.00	0.38
12/23/1999	2.80	0.08	0.00	0.00	0.00
12/24/1999	2.79	0.07	0.00	0.00	0.30
12/25/1999	2.96		0.00	0.00	0.69

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
12/26/1999	4.14		0.00	0.00	1.73
12/27/1999	3.14	0.22	0.00	0.00	0.52
12/28/1999	2.61	0.11	0.00	0.00	0.00
12/29/1999	3.11		0.00	0.00	0.00
12/30/1999	3.17		0.00	0.00	0.00
12/31/1999	2.61		0.00	0.00	0.00
01/01/2000	2.42		0.00	0.00	0.00
01/02/2000	2.80	0.23	0.00	0.00	0.00
01/03/2000	3.99	0.07	1.13	0.00	0.75
01/04/2000	3.54	0.22	0.00	0.00	0.55
01/05/2000	2.70	0.01	0.00	0.00	0.00
01/06/2000	3.23		0.00	0.00	0.25
01/07/2000	3.25		0.00	0.00	0.43
01/08/2000	3.76	0.03	0.00	0.00	0.98
01/09/2000	5.56	0.38	2.23	0.00	1.36
01/10/2000	4.12	0.10	0.00	0.00	0.71
01/11/2000	2.90		0.00	0.00	0.17
01/12/2000	2.76		0.00	0.00	0.09
01/13/2000	3.87	0.05	0.00	0.00	1.04
01/14/2000	2.77	0.06	0.00	0.00	0.08
01/15/2000	3.65		0.00	0.00	1.00
01/16/2000	2.63		0.00	0.00	0.13
01/17/2000	3.16	0.15	0.00	0.00	0.44
01/18/2000	2.98		0.00	0.00	0.25
01/19/2000	2.65	0.18	0.00	0.00	0.00
01/20/2000	3.32	0.25	0.00	0.00	0.40
01/21/2000	3.00	0.07	0.00	0.00	0.25
01/22/2000	3.63	0.13	0.00	0.00	1.06
01/23/2000	3.42		0.00	0.00	0.78
01/24/2000	2.91	0.02	0.00	0.00	0.24
01/25/2000	2.67	0.31	0.00	0.00	0.00
01/26/2000	2.80	0.16	0.00	0.00	0.00
01/27/2000	3.23		0.00	0.00	0.38
01/28/2000	2.87		0.00	0.00	0.18
01/29/2000	3.64	0.11	0.00	0.00	1.03
01/30/2000	3.32	0.18	0.00	0.00	0.72
01/31/2000	2.92		0.00	0.00	0.15
02/01/2000	2.71	0.01	0.00	0.00	0.00
02/02/2000	2.68		0.00	0.00	0.00
02/03/2000	3.03	0.15	0.00	0.00	0.00
02/04/2000	3.18	0.14	0.00	0.00	0.26
02/05/2000	3.11		0.00	0.00	0.51
02/06/2000	3.09		0.00	0.00	0.54
02/07/2000	3.49		0.00	0.00	0.60
02/08/2000	2.76		0.00	0.00	0.00
02/09/2000	3.27		0.00	0.00	0.00
02/10/2000	3.39	0.04	0.00	0.00	0.10
02/11/2000	3.46		0.00	0.00	0.65
02/12/2000	3.07		0.00	0.00	0.47
02/13/2000	2.91	0.05	0.00	0.00	0.40
02/14/2000	3.13	0.05	0.00	0.00	0.44
02/15/2000	2.91		0.00	0.00	0.21
02/16/2000	2.96		0.00	0.00	0.23
02/17/2000	3.21		0.00	0.00	0.45
02/18/2000	3.04	0.37	0.00	0.00	0.34
02/19/2000	3.28		0.00	0.00	0.58

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
02/20/2000	3.22		0.00	0.00	0.30
02/21/2000	4.59		0.00	0.00	0.83
02/22/2000	4.82		0.00	0.00	0.31
02/23/2000	3.30		0.00	0.00	0.00
02/24/2000	6.22	0.42	5.78	0.00	0.91
02/25/2000	4.11		0.00	0.00	1.03
02/26/2000	5.78	0.63	5.85	0.00	0.72
02/27/2000	5.38		0.05	0.00	2.05
02/28/2000	3.24		0.00	0.00	0.37
02/29/2000	2.74		0.00	0.00	0.00
03/01/2000	2.89	0.06	0.00	0.00	0.01
03/02/2000	3.43		0.00	0.00	0.66
03/03/2000	2.88		0.00	0.00	0.25
03/04/2000	2.72		0.00	0.00	0.18
03/05/2000	3.21		0.00	0.00	0.71
03/06/2000	2.92		0.00	0.00	0.23
03/07/2000	3.07		0.00	0.00	0.38
03/08/2000	3.55		0.00	0.00	0.86
03/09/2000	2.79		0.00	0.00	0.02
03/10/2000	2.81	0.01	0.00	0.00	0.21
03/11/2000	2.83		0.00	0.00	0.30
03/12/2000	2.86		0.00	0.00	0.37
03/13/2000	3.13	0.10	0.00	0.00	0.29
03/14/2000	3.33	0.11	0.00	0.00	0.55
03/15/2000	5.37	0.56	5.75	0.00	0.35
03/16/2000	5.73	0.09	0.00	0.00	2.15
03/17/2000	4.43		0.00	0.00	1.71
03/18/2000	2.71		0.00	0.00	0.22
03/19/2000	5.01	0.30	2.53	0.00	1.36
03/20/2000	5.21	0.31	1.41	0.00	0.18
03/21/2000	2.88		0.00	0.00	0.09
03/22/2000	3.69		0.00	0.00	0.98
03/23/2000	3.13		0.00	0.00	0.27
03/24/2000	3.28	0.04	0.00	0.00	0.40
03/25/2000	2.95		0.00	0.00	0.34
03/26/2000	2.71		0.00	0.00	0.17
03/27/2000	3.05	0.02	0.00	0.00	0.24
03/28/2000	3.58	0.17	0.91	0.00	0.00
03/29/2000	2.66		0.00	0.00	0.00
03/30/2000	3.03		0.00	0.00	0.28
03/31/2000	3.69		0.00	0.00	1.06
04/01/2000	3.03	0.02	0.00	0.00	0.51
04/02/2000	3.01	0.14	0.00	0.00	0.16
04/03/2000	3.02		0.00	0.00	0.42
04/04/2000	2.91		0.00	0.00	0.26
04/05/2000	2.66		0.00	0.00	0.00
04/06/2000	3.18		0.00	0.00	0.42
04/07/2000	5.63	0.85	5.08	0.00	1.05
04/08/2000	6.73	0.15	0.00	0.00	2.17
04/09/2000	4.87		0.00	0.00	2.33
04/10/2000	3.35	0.03	0.00	0.00	0.65
04/11/2000	2.83	0.02	0.00	0.00	0.00
04/12/2000	2.65		0.00	0.00	0.00
04/13/2000	3.59		0.00	0.00	0.85
04/14/2000	3.30		0.00	0.00	0.63
04/15/2000	2.95		0.00	0.00	0.36

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
04/16/2000	2.80	0.10	0.00	0.00	0.25
04/17/2000	4.73	0.13	1.80	0.00	0.91
04/18/2000	3.56		0.00	0.00	0.83
04/19/2000	4.86	0.66	4.18	0.00	0.50
04/20/2000	8.55	1.24	12.08	0.43	0.88
04/21/2000	6.31	0.17	1.56	0.13	2.21
04/22/2000	5.21		0.00	0.00	2.54
04/23/2000	5.61	0.15	0.55	0.00	2.40
04/24/2000	5.35		0.00	0.00	2.41
04/25/2000	4.96		0.00	0.00	2.30
04/26/2000	3.55		0.00	0.00	0.94
04/27/2000	3.25		0.00	0.00	0.45
04/28/2000	2.99		0.00	0.00	0.39
04/29/2000	2.75		0.00	0.00	0.29
04/30/2000	2.76		0.00	0.00	0.35
05/01/2000	5.19	0.42	4.26		1.08
05/02/2000	3.90		0.00	0.00	1.26
05/03/2000	2.62		0.00	0.00	0.00
05/04/2000	2.82		0.00	0.00	0.00
05/05/2000	2.71		0.00	0.00	0.00
05/06/2000	3.75		0.00	0.00	1.19
05/07/2000	3.22	0.02	0.00	0.00	0.67
05/08/2000	3.24		0.00	0.00	0.41
05/09/2000	6.05	0.98	4.66	0.00	1.18
05/10/2000	5.00	0.01	0.00	0.00	2.15
05/11/2000	5.71	0.27	3.15	0.00	1.65
05/12/2000	4.40	0.06	0.00	0.00	1.54
05/13/2000	2.97		0.00	0.00	0.26
05/14/2000	2.72		0.00	0.00	0.21
05/15/2000	2.79		0.00	0.00	0.12
05/16/2000	4.29	0.18	0.70	0.00	0.81
05/17/2000	3.02		0.00	0.00	0.29
05/18/2000	5.23	0.81	5.00	0.00	0.37
05/19/2000	5.21	0.06	0.00	0.00	2.36
05/20/2000	4.53	0.03	0.00	0.00	2.09
05/21/2000	4.09		0.00	0.00	1.56
05/22/2000	4.10	0.04	0.00	0.00	1.35
05/23/2000	3.27		0.00	0.00	0.55
05/24/2000	2.74		0.00	0.00	0.00
05/25/2000	2.87		0.00	0.00	0.04
05/26/2000	3.18	0.09	0.00	0.00	0.40
05/27/2000	2.81	0.30	0.00	0.00	0.29
05/28/2000	6.36	0.83	5.15	0.00	1.57
05/29/2000	4.80		0.00	0.00	2.35
05/30/2000	4.83	0.02	0.00	0.00	2.13
05/31/2000	5.62	0.30	1.65	0.00	1.96
06/01/2000	5.10		0.00	0.00	2.23
06/02/2000	3.42		0.00	0.00	0.25
06/03/2000	2.84		0.00	0.00	0.36
06/04/2000	2.95	0.05	0.00	0.00	0.53
06/05/2000	6.95	1.22	8.73	0.00	0.93
06/06/2000	5.06		0.00	0.00	2.37
06/07/2000	4.98	0.01	0.00	0.00	2.28
06/08/2000	5.02		0.00	0.00	2.20
06/09/2000	3.56		0.00	0.00	0.85
06/10/2000	2.87		0.00	0.00	0.22

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
06/11/2000	3.56	0.31	1.70	0.00	0.27
06/12/2000	6.27	0.83	4.01	0.00	1.48
06/13/2000	6.84	1.12	6.01	0.00	1.85
06/14/2000	6.15	0.25	2.11	0.00	2.30
06/15/2000	5.11		0.00	0.00	2.12
06/16/2000	4.74		0.00	0.00	1.94
06/17/2000	4.78		0.00	0.00	2.23
06/18/2000	4.48		0.00	0.00	2.01
06/19/2000	3.40		0.00	0.00	0.63
06/20/2000	4.39	1.06	2.50	0.00	0.44
06/21/2000	6.28	0.16	3.16	0.00	2.07
06/22/2000	5.39		0.00	0.00	2.45
06/23/2000	5.05		0.00	0.00	2.32
06/24/2000	6.24	2.07	5.43	0.19	1.74
06/25/2000	6.10	0.06	2.46	3.19	1.90
06/26/2000	5.85	0.40	2.51	0.44	1.89
06/27/2000	4.76		0.00	0.16	1.86
06/28/2000	5.29	0.10	0.00	0.00	2.30
06/29/2000	5.28		0.00	0.00	2.19
06/30/2000	5.05		0.00	0.00	2.22
07/01/2000	4.89		0.00	0.00	2.27
07/02/2000	4.85		0.00	0.00	2.26
07/03/2000	6.93	1.02	5.41	0.00	1.73
07/04/2000	5.03		0.00	0.00	2.46
07/05/2000	5.98	0.57	2.48	0.00	1.97
07/06/2000	6.25	0.24	1.33	0.00	2.38
07/07/2000	5.21		0.00	0.00	2.46
07/08/2000	4.90		0.00	0.00	2.21
07/09/2000	4.83	0.16	1.05	0.00	1.69
07/10/2000	6.73	0.63	6.81	0.00	1.27
07/11/2000	4.94		0.00	0.00	1.97
07/12/2000	5.07		0.00	0.00	2.18
07/13/2000	4.60		0.00	0.00	1.63
07/14/2000	5.87	0.72	3.08	0.00	1.54
07/15/2000	5.05		0.00	0.00	2.35
07/16/2000	4.79		0.00	0.00	2.18
07/17/2000	4.73		0.00	0.00	1.79
07/18/2000	3.66		0.00	0.00	0.78
07/19/2000	2.92		0.00	0.00	0.18
07/20/2000	2.88		0.00	0.00	0.00
07/21/2000	2.63		0.00	0.00	0.00
07/22/2000	2.46		0.00	0.00	0.00
07/23/2000	2.45		0.00	0.00	0.00
07/24/2000	2.73		0.00	0.00	0.05
07/25/2000	3.22		0.00	0.00	0.50
07/26/2000	3.84		0.00	0.00	0.50
07/27/2000	4.56		0.00	0.00	2.28
07/28/2000	4.19	0.26	1.78	0.00	0.73
07/29/2000	3.58	0.10	0.00	0.00	0.91
07/30/2000	3.48	0.11	0.00	0.00	0.55
07/31/2000	2.93	0.10	0.00	0.00	0.55
08/01/2000	5.46	0.26	1.85	0.00	1.31
08/02/2000	4.08	0.22	1.06	0.00	0.66
08/03/2000	2.64		0.00	0.00	0.00
08/04/2000	3.47		0.00	0.00	0.71
08/05/2000	3.12	0.10	0.00	0.00	0.30

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
08/06/2000	4.43	1.03	3.28	0.00	0.64
08/07/2000	4.81		0.00	0.00	1.80
08/08/2000	4.47		0.00	0.00	1.58
08/09/2000	5.10		0.00	0.00	2.15
08/10/2000	5.17		0.00	0.00	2.19
08/11/2000	3.49		0.00	0.00	0.61
08/12/2000	2.83		0.00	0.00	0.20
08/13/2000	2.98		0.00	0.00	0.36
08/14/2000	3.18		0.00	0.00	0.35
08/15/2000	2.88		0.00	0.00	0.10
08/16/2000	3.08		0.00	0.00	0.19
08/17/2000	6.05	0.76	3.75	0.00	1.64
08/18/2000	5.34	0.01	0.00	0.00	2.68
08/19/2000	3.95		0.00	0.00	1.48
08/20/2000	3.13		0.00	0.00	0.71
08/21/2000	3.01		0.00	0.00	0.38
08/22/2000	3.10	0.01	0.00	0.00	0.38
08/23/2000	3.97	0.03	0.00	0.00	1.10
08/24/2000	3.28		0.00	0.00	0.45
08/25/2000	2.96		0.00	0.00	0.39
08/26/2000	2.83		0.00	0.00	0.35
08/27/2000	2.85		0.00	0.00	0.39
08/28/2000	3.10		0.00	0.00	0.38
08/29/2000	3.15		0.00	0.00	0.39
08/30/2000	3.03		0.00	0.00	0.25
08/31/2000	3.09		0.00	0.00	0.20
09/01/2000	3.05		0.00	0.00	0.37
09/02/2000	2.88		0.00	0.00	0.42
09/03/2000	2.82		0.00	0.00	0.44
09/04/2000	2.83		0.00	0.00	0.40
09/05/2000	2.79		0.00	0.00	0.23
09/06/2000	3.09		0.00	0.00	0.51
09/07/2000	2.91		0.00	0.00	0.16
09/08/2000	3.54		0.00	0.00	0.91
09/09/2000	2.93		0.00	0.00	0.34
09/10/2000	2.91	0.01	0.00	0.00	0.37
09/11/2000	4.85	2.35	4.21	0.00	0.60
09/12/2000	7.44	1.00	5.26	5.73	2.00
09/13/2000	5.45		0.00	0.00	2.70
09/14/2000	5.96	0.13	0.00	0.00	2.70
09/15/2000	6.16	0.24	1.35	0.00	2.52
09/16/2000	5.13		0.00	0.00	2.63
09/17/2000	4.51		0.00	0.00	1.99
09/18/2000	2.96		0.00	0.00	0.30
09/19/2000	2.70		0.00	0.00	0.00
09/20/2000	4.15	0.39	4.01	0.00	0.01
09/21/2000	3.21		0.00	0.00	0.39
09/22/2000	3.00	0.20	0.00	0.00	0.36
09/23/2000	5.12	0.20	0.71	0.00	1.62
09/24/2000	3.41	0.20	0.00	0.00	0.17
09/25/2000	3.04		0.00	0.00	0.37
09/26/2000	3.05		0.00	0.00	0.38
09/27/2000	2.91		0.00	0.00	0.25
09/28/2000	2.97		0.00	0.00	0.23
09/29/2000	2.92		0.00	0.00	0.35
09/30/2000	3.02		0.00	0.00	0.54

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
10/01/2000	2.90		0.00	0.00	0.45
10/02/2000	2.95		0.00	0.00	0.32
10/03/2000	3.16	0.24	0.71	0.00	0.29
10/04/2000	6.76	0.84	4.73	0.00	1.70
10/05/2000	5.61	0.20	0.00	0.00	2.40
10/06/2000	5.18	0.09	0.00	0.00	2.45
10/07/2000	3.20	0.09	0.00	0.00	0.73
10/08/2000	6.31	0.57	6.91	0.00	0.70
10/09/2000	5.25		0.00	0.00	2.36
10/10/2000	3.97		0.00	0.00	1.43
10/11/2000	3.06		0.00	0.00	0.44
10/12/2000	3.46		0.00	0.00	0.57
10/13/2000	2.72		0.00	0.00	0.09
10/14/2000	2.88	0.05	0.00	0.00	0.28
10/15/2000	2.87	0.04	0.00	0.00	0.41
10/16/2000	3.19	0.02	0.00	0.00	0.50
10/17/2000	3.48		0.00	0.00	0.90
10/18/2000	2.88		0.00	0.00	0.29
10/19/2000	2.74		0.00	0.00	0.00
10/20/2000	2.89		0.00	0.00	0.27
10/21/2000	2.90		0.00	0.00	0.43
10/22/2000	2.91		0.00	0.00	0.46
10/23/2000	3.03	0.03	0.00	0.00	0.36
10/24/2000	5.63	0.51	2.56	0.00	1.59
10/25/2000	4.85	0.01	0.00	0.00	2.27
10/26/2000	3.74	0.01	0.00	0.00	1.03
10/27/2000	2.92	0.08	0.00	0.00	0.01
10/28/2000	2.72		0.00	0.00	0.32
10/29/2000	2.74		0.00	0.00	0.41
10/30/2000	2.91		0.00	0.00	0.29
10/31/2000	2.69		0.00	0.00	0.00
11/01/2000	2.66		0.00	0.00	0.00
11/02/2000	2.71		0.00	0.00	0.00
11/03/2000	2.97		0.00	0.00	0.37
11/04/2000	2.82		0.00	0.00	0.34
11/05/2000	2.84		0.00	0.00	0.29
11/06/2000	4.08	0.32	0.23	0.00	0.78
11/07/2000	3.52		1.06	0.00	0.16
11/08/2000	2.85	0.05	0.00	0.00	0.32
11/09/2000	6.12	1.36	6.48	0.00	0.39
11/10/2000	5.29	0.02	0.00	0.00	2.37
11/11/2000	4.80		0.00	0.00	2.36
11/12/2000	3.49	0.07	0.00	0.00	1.07
11/13/2000	4.97	0.34	1.85	0.00	0.00
11/14/2000	3.92		0.00	0.00	1.34
11/15/2000	3.30		0.00	0.00	0.69
11/16/2000	2.58		0.00	0.00	0.00
11/17/2000	2.98	0.04	0.00	0.00	0.27
11/18/2000	3.10		0.00	0.00	0.55
11/19/2000	2.97	0.06	0.00	0.00	0.39
11/20/2000	3.43	0.19	0.00	0.00	0.89
11/21/2000	2.94	0.01	0.00	0.00	0.25
11/22/2000	2.62		0.00	0.00	0.00
11/23/2000	2.33		0.00	0.00	0.00
11/24/2000	2.69		0.00	0.00	0.31
11/25/2000	3.36	0.16	0.00	0.00	0.37

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
11/26/2000	4.10	0.29	0.00	0.00	0.00
11/27/2000	2.85	0.01	0.00	0.00	0.08
11/28/2000	2.95		0.00	0.00	0.30
11/29/2000	5.02	0.27	2.35	0.00	0.26
11/30/2000	4.86	0.31	1.06	0.00	0.53
12/01/2000	2.89	0.03	0.00	0.00	0.23
12/02/2000	2.93		0.00	0.00	0.44
12/03/2000	3.01		0.00	0.00	0.61
12/04/2000	3.23		0.50	0.00	0.56
12/05/2000	2.82	0.01	0.00	0.00	0.32
12/06/2000	2.74	0.05	0.00	0.00	0.33
12/07/2000	2.96	0.30	0.00	0.00	0.39
12/08/2000	2.97		0.00	0.00	0.35
12/09/2000	2.73		0.00	0.00	0.30
12/10/2000	2.82		0.00	0.00	0.41
12/11/2000	2.81	0.66	0.00	0.00	0.36
12/12/2000	2.54	0.13	0.00	0.00	0.04
12/13/2000	3.34	0.26	0.00	0.00	0.85
12/14/2000	3.36	0.01	0.00	0.00	0.69
12/15/2000	2.95	0.03	0.00	0.00	0.32
12/16/2000	3.65	0.03	0.00	0.00	0.37
12/17/2000	3.05	0.02	0.00	0.00	0.40
12/18/2000	3.35	0.16	0.00	0.00	0.81
12/19/2000	2.91	0.51	0.00	0.00	0.29
12/20/2000	2.89	0.01	0.00	0.00	0.32
12/21/2000	2.94	0.09	0.00	0.00	0.30
12/22/2000	3.16		0.00	0.00	0.79
12/23/2000	2.99	0.01	0.00	0.00	0.40
12/24/2000	2.57	0.09	0.00	0.00	0.34
12/25/2000	2.16	0.01	0.00	0.00	0.34
12/26/2000	2.95	0.03	0.00	0.00	0.40
12/27/2000	2.97	0.03	0.00	0.00	0.44
12/28/2000	2.67		0.00	0.00	0.30
12/29/2000	2.67	0.13	0.00	0.00	0.30
12/30/2000	3.74	0.06	0.00	0.00	0.30
12/31/2000	2.97	0.19	0.00	0.00	0.73
01/01/2001	2.78	0.01	0.00	0.00	0.38
01/02/2001	2.83	0.01	0.00	0.00	0.45
01/03/2001	3.05	0.06	0.00	0.00	0.45
01/04/2001	3.08		0.00	0.00	0.46
01/05/2001	3.14		0.00	0.00	0.27
01/06/2001	3.11		0.00	0.00	0.42
01/07/2001	2.85	0.02	0.00	0.00	0.33
01/08/2001	2.95	0.14	0.00	0.00	0.35
01/09/2001	2.99		0.00	0.00	0.36
01/10/2001	3.01		0.00	0.00	0.34
01/11/2001	2.84		0.00	0.00	0.30
01/12/2001	3.01		0.00	0.00	0.40
01/13/2001	2.92		0.00	0.00	0.27
01/14/2001	3.72	0.10	0.00	0.00	0.26
01/15/2001	3.25	0.03	0.00	0.00	0.04
01/16/2001	2.84		0.00	0.00	0.30
01/17/2001	2.88		0.00	0.00	0.28
01/18/2001	2.85		0.00	0.00	0.28
01/19/2001	2.78	0.01	0.00	0.00	0.31
01/20/2001	2.66		0.00	0.00	0.37

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
01/21/2001	2.86		0.00	0.00	0.45
01/22/2001	2.97		0.00	0.00	0.36
01/23/2001	2.90		0.00	0.00	0.29
01/24/2001	2.75	0.17	0.00	0.00	0.30
01/25/2001	2.99	0.02	0.00	0.00	0.27
01/26/2001	3.30	0.20	0.00	0.00	0.70
01/27/2001	2.94		0.00	0.00	0.40
01/28/2001	2.79	0.05	0.00	0.00	0.46
01/29/2001	5.08	0.45	5.26	0.00	0.29
01/30/2001	5.03	0.12	1.15	0.00	0.28
01/31/2001	4.01	0.02	0.00	0.00	0.88
02/01/2001	3.86	0.01	0.00	0.00	0.60
02/02/2001	3.68	0.07	0.00	0.00	1.22
02/03/2001	2.97	0.01	0.00	0.00	0.44
02/04/2001	3.05	0.08	0.00	0.00	0.40
02/05/2001	2.99	0.06	0.00	0.00	0.44
02/06/2001	3.92	0.15	0.00	0.00	1.19
02/07/2001	3.75	0.02	0.00	0.00	1.16
02/08/2001	5.03	0.41	3.46	0.00	0.24
02/09/2001	8.90	1.16	14.83	0.00	0.42
02/10/2001	5.67	0.03	0.00	0.00	2.40
02/11/2001	5.10		0.00	0.00	2.38
02/12/2001	5.20		0.00	0.00	2.37
02/13/2001	5.15		0.00	0.00	2.43
02/14/2001	5.07	0.20	0.00	0.00	1.05
02/15/2001	4.36		0.00	0.00	1.46
02/16/2001	3.45		0.00	0.00	0.59
02/17/2001	3.96	0.05	0.00	0.00	1.46
02/18/2001	3.79		0.00	0.00	1.32
02/19/2001	3.05		0.00	0.00	0.26
02/20/2001	2.75		0.00	0.00	0.00
02/21/2001	2.85		0.00	0.00	0.24
02/22/2001	2.88	0.04	0.00	0.00	0.24
02/23/2001	3.14		0.00	0.00	0.40
02/24/2001	6.60	1.70	13.15	1.11	0.27
02/25/2001	7.03		2.80	2.60	2.10
02/26/2001	5.48		0.00	0.00	2.48
02/27/2001	4.98		0.00	0.00	2.10
02/28/2001	5.18		0.00	0.00	2.44
03/01/2001	5.28		0.00	0.00	2.40
03/02/2001	5.05	0.02	0.00	0.00	2.13
03/03/2001	3.39		0.00	0.00	0.73
03/04/2001	3.11		0.00	0.00	0.50
03/05/2001	3.83	0.14	0.00	0.00	1.11
03/06/2001	3.35		0.00	0.00	0.66
03/07/2001	4.02		0.00	0.00	1.17
03/08/2001	3.45	0.02	0.00	0.00	0.62
03/09/2001	3.35	0.26	0.00	0.00	0.23
03/10/2001	3.40		0.00	0.00	0.37
03/11/2001	4.02	0.11	0.00	0.00	0.82
03/12/2001	3.99	0.09	0.00	0.00	0.89
03/13/2001	3.65		0.00	0.00	0.74
03/14/2001	4.57	0.07	0.00	0.00	1.79
03/15/2001	4.17	0.16	0.38	0.00	0.55
03/16/2001	3.67	0.19	0.00	0.00	0.85
03/17/2001	4.09	0.13	0.00	0.00	0.57

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
03/18/2001	3.08		0.00	0.00	0.45
03/19/2001	4.15		0.00	0.00	1.29
03/20/2001	3.24		0.00	0.00	0.50
03/21/2001	3.63		0.00	0.00	0.81
03/22/2001	3.21		0.00	0.00	0.33
03/23/2001	3.56		0.00	0.00	0.89
03/24/2001	2.91		0.00	0.00	0.37
03/25/2001	3.91	0.14	0.00	0.00	1.25
03/26/2001	3.66	0.04	0.00	0.00	0.93
03/27/2001	3.76		0.00	0.00	0.96
03/28/2001	3.55		0.00	0.00	0.87
03/29/2001	4.10	0.02	0.00	0.00	1.29
03/30/2001	2.98		0.00	0.00	0.26
03/31/2001	3.98	0.14	0.00	0.00	1.04
04/01/2001	2.79		0.00	0.00	0.25
04/02/2001	2.99		0.00	0.00	0.35
04/03/2001	3.75		0.00	0.00	1.18
04/04/2001	3.67		0.00	0.00	1.03
04/05/2001	4.12	0.56	3.21	0.00	0.52
04/06/2001	7.19	0.94	5.10	0.00	1.53
04/07/2001	4.97		0.00	0.00	2.29
04/08/2001	5.01		0.00	0.00	2.27
04/09/2001	5.41	0.17	1.98	0.00	2.00
04/10/2001	4.97		0.00	0.00	2.21
04/11/2001	4.99	0.07	0.00	0.00	2.13
04/12/2001	4.64		0.00	0.00	1.69
04/13/2001	3.34		0.00	0.00	0.81
04/14/2001	3.21	0.01	0.00	0.00	0.55
04/15/2001	4.94	0.91	6.95	0.00	0.98
04/16/2001	5.18	0.18	0.71	0.00	1.83
04/17/2001	5.44	0.08	0.00	0.00	2.04
04/18/2001	4.91		0.00	0.00	2.09
04/19/2001	4.90		0.00	0.00	2.09
04/20/2001	4.79	0.19	0.00	0.00	1.15
04/21/2001	5.41	0.52	3.05	0.00	1.51
04/22/2001	5.17	0.12	1.10	0.00	1.93
04/23/2001	5.23	0.11	1.18	0.00	1.86
04/24/2001	4.71		0.00	0.00	1.91
04/25/2001	3.85		0.00	0.00	1.07
04/26/2001	4.01		0.00	0.00	1.02
04/27/2001	2.94		0.00	0.00	0.20
04/28/2001	2.49		0.00	0.00	0.00
04/29/2001	2.48		0.00	0.00	0.00
04/30/2001	2.78		0.00	0.00	0.00
05/01/2001	3.34		0.00	0.00	0.56
05/02/2001	4.16		0.00	0.00	1.20
05/03/2001	4.06		0.00	0.00	1.19
05/04/2001	4.00		0.00	0.00	1.18
05/05/2001	3.68		0.00	0.00	1.17
05/06/2001	3.11	0.08	0.00	0.00	0.50
05/07/2001	3.66		0.00	0.00	0.67
05/08/2001	2.66		0.35	0.00	0.00
05/09/2001	3.00		0.00	0.00	0.39
05/10/2001	4.26	0.04	0.00	0.00	1.36
05/11/2001	3.93	0.19	0.00	0.00	0.90
05/12/2001	3.15	0.01	0.00	0.00	0.46

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
05/13/2001	2.86		0.00	0.00	0.45
05/14/2001	4.80	0.75	4.06	0.00	0.72
05/15/2001	4.97		0.00	0.00	2.32
05/16/2001	5.54	0.21	1.35	0.00	2.07
05/17/2001	4.99		0.00	0.00	2.24
05/18/2001	4.25	0.12	1.00	0.00	1.02
05/19/2001	3.27		0.00	0.00	0.84
05/20/2001	3.28		0.00	0.00	0.85
05/21/2001	5.28	0.46	2.80	0.00	1.41
05/22/2001	3.96		0.00	0.00	1.22
05/23/2001	4.75	0.24	1.71	0.00	1.17
05/24/2001	3.89	0.07	0.00	0.00	0.94
05/25/2001	4.77	0.37	4.40	0.00	0.60
05/26/2001	5.40	0.58	5.03	0.00	1.22
05/27/2001	6.45	0.28	3.46	0.00	1.80
05/28/2001	4.51		0.00	0.00	1.96
05/29/2001	4.43		0.00	0.00	1.79
05/30/2001	4.46		0.00	0.00	1.74
05/31/2001	4.95	0.45	1.36	0.00	1.43
06/01/2001	5.98	0.10	2.20	0.00	1.87
06/02/2001	6.23	0.36	3.78	0.00	1.80
06/03/2001	5.22	0.11	0.00	0.00	2.16
06/04/2001	4.16		0.00	0.00	1.44
06/05/2001	6.75	1.02	7.86	0.00	0.87
06/06/2001	5.38	0.04	0.00	0.00	2.31
06/07/2001	5.18		0.00	0.00	2.29
06/08/2001	4.02		0.00	0.00	1.29
06/09/2001	3.17		0.00	0.00	0.50
06/10/2001	2.99		0.00	0.00	0.43
06/11/2001	6.02	0.85	2.80	0.00	1.76
06/12/2001	6.66	0.48	2.56	0.00	1.91
06/13/2001	5.20		0.00	0.00	2.24
06/14/2001	5.27	0.05	0.00	0.00	2.18
06/15/2001	6.77	1.13	4.78	0.00	1.69
06/16/2001	5.05		0.00	0.00	2.30
06/17/2001	4.96		0.00	0.00	2.27
06/18/2001	5.03		0.00	0.00	2.24
06/19/2001	4.50		0.00	0.00	1.74
06/20/2001	3.87		0.00	0.00	1.15
06/21/2001	5.42	0.89	4.90	0.00	0.87
06/22/2001	5.11		0.00	0.00	2.30
06/23/2001	4.90		0.00	0.00	2.34
06/24/2001	4.33		0.00	0.00	1.84
06/25/2001	3.26		0.00	0.00	0.49
06/26/2001	3.17		0.00	0.00	0.44
06/27/2001	3.40		0.00	0.00	0.62
06/28/2001	3.77		0.00	0.00	0.84
06/29/2001	3.77		0.00	0.00	0.96
06/30/2001	3.18		0.00	0.00	0.69
07/01/2001	2.76		0.00	0.00	0.32
07/02/2001	3.48		0.00	0.00	0.96
07/03/2001	3.82	0.19	1.01	0.00	0.62
07/04/2001	3.03		0.00	0.00	0.71
07/05/2001	3.42		0.00	0.00	0.74
07/06/2001	2.71		0.00	0.00	0.28
07/07/2001	6.48	2.61	6.38	3.79	1.10

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
07/08/2001	4.78		0.00	0.16	1.90
07/09/2001	5.16		0.00	0.00	2.16
07/10/2001	5.03		0.00	0.00	2.12
07/11/2001	5.25		0.00	0.00	2.37
07/12/2001	5.09		0.00	0.00	2.29
07/13/2001	4.94		0.00	0.00	2.24
07/14/2001	3.08		0.00	0.00	0.53
07/15/2001	3.09		0.00	0.00	0.47
07/16/2001	3.73		0.00	0.00	1.01
07/17/2001	4.34	0.07	0.96	0.00	1.11
07/18/2001	3.98		0.00	0.00	1.07
07/19/2001	3.15		0.00	0.00	0.27
07/20/2001	3.28	0.01	0.00	0.00	0.50
07/21/2001	4.77	0.33	2.61	0.00	0.90
07/22/2001	4.85	0.07	0.00	0.00	2.18
07/23/2001	5.27	0.82	3.38	0.00	1.20
07/24/2001	5.28		0.00	0.00	2.26
07/25/2001	5.40	0.17	1.06	0.00	1.98
07/26/2001	4.92		0.00	0.00	2.08
07/27/2001	3.93		0.00	0.00	1.04
07/28/2001	3.02		0.00	0.00	0.50
07/29/2001	3.18		0.00	0.00	0.51
07/30/2001	3.34		0.00	0.00	0.59
07/31/2001	3.60		0.00	0.00	0.85
08/01/2001	3.47		0.00	0.00	0.75
08/02/2001	4.81	0.32	2.50	0.00	0.98
08/03/2001	3.78		0.00	0.00	1.09
08/04/2001	2.94		0.00	0.00	0.34
08/05/2001	2.74		0.00	0.00	0.34
08/06/2001	3.02		0.00	0.00	0.38
08/07/2001	2.88		0.00	0.00	0.00
08/08/2001	3.05		0.00	0.00	0.28
08/09/2001	4.60	0.40	1.51	0.00	1.39
08/10/2001	4.87	0.02	1.20	0.00	1.35
08/11/2001	2.79		0.00	0.00	0.45
08/12/2001	2.87		0.00	0.00	0.54
08/13/2001	3.32		0.00	0.00	0.82
08/14/2001	2.66		0.00	0.00	0.13
08/15/2001	3.24		0.00	0.00	0.79
08/16/2001	6.03	0.52	2.41	0.00	1.68
08/17/2001	3.29		0.00	0.00	0.81
08/18/2001	4.55	0.24	1.55	0.00	1.00
08/19/2001	5.20	0.19	1.73	0.00	1.87
08/20/2001	3.36		0.00	0.00	0.55
08/21/2001	2.96	0.04	0.00	0.00	0.43
08/22/2001	3.57	0.02	0.00	0.00	0.85
08/23/2001	3.05	0.01	0.00	0.00	0.35
08/24/2001	3.38		0.00	0.00	0.74
08/25/2001	5.66	3.49	7.13	2.17	0.86
08/26/2001	7.27	0.28	5.65	8.54	1.66
08/27/2001	5.38		0.00	0.01	2.38
08/28/2001	5.24		0.00	0.00	2.31
08/29/2001	4.95		0.00	0.00	2.23
08/30/2001	5.08		0.00	0.00	2.14
08/31/2001	4.88	0.04	0.00	0.00	2.21
09/01/2001	3.47		0.00	0.00	1.03

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
09/02/2001	2.69		0.00	0.00	0.50
09/03/2001	3.49	0.03	0.00	0.00	0.83
09/04/2001	2.83		0.00	0.00	0.25
09/05/2001	3.51		0.00	0.00	0.93
09/06/2001	3.57	0.25	0.70	0.00	0.68
09/07/2001	5.17	0.02	1.43	0.00	1.53
09/08/2001	3.10	0.04	0.20	0.00	0.54
09/09/2001	6.47	0.74	5.36	0.00	1.35
09/10/2001	4.82		0.00	0.00	2.25
09/11/2001	4.73		0.00	0.00	2.28
09/12/2001	3.11		0.00	0.00	0.62
09/13/2001	3.13	0.01	0.00	0.00	0.44
09/14/2001	2.99		0.00	0.00	0.59
09/15/2001	2.91		0.00	0.00	0.49
09/16/2001	2.82		0.00	0.00	0.54
09/17/2001	4.03	1.42	3.18	0.00	0.57
09/18/2001	5.68	0.09	1.78	0.00	2.10
09/19/2001	7.45	0.71	3.86	0.00	1.67
09/20/2001	5.18		0.00	0.00	2.41
09/21/2001	5.05	0.08	0.00	0.00	2.31
09/22/2001	4.65		0.00	0.00	2.27
09/23/2001	3.52	0.07	0.00	0.00	1.12
09/24/2001	3.37	0.01	0.00	0.00	0.76
09/25/2001	3.44	0.21	0.98	0.00	0.22
09/26/2001	2.63		0.00	0.00	0.18
09/27/2001	3.89		0.00	0.00	1.18
09/28/2001	3.55		0.00	0.00	1.04
09/29/2001	2.70		0.00	0.00	0.36
09/30/2001	2.78		0.00	0.00	0.43
10/01/2001	2.69		0.00	0.00	0.10
10/02/2001	2.96		0.00	0.00	0.44
10/03/2001	3.64		0.00	0.00	0.94
10/04/2001	4.91	0.80	6.31	0.00	0.30
10/05/2001	9.13	1.19	15.85	0.00	0.36
10/06/2001	5.56		0.00	0.00	2.36
10/07/2001	5.32		0.00	0.00	2.34
10/08/2001	5.18		0.00	0.00	2.28
10/09/2001	5.32		0.00	0.00	2.17
10/10/2001	4.32	0.09	0.00	0.00	1.17
10/11/2001	6.63	0.47	3.11	0.00	1.66
10/12/2001	7.69	1.09	7.76	0.00	1.45
10/13/2001	7.43	2.09	11.96	3.66	1.00
10/14/2001	7.75	0.49	6.50	7.97	1.55
10/15/2001	5.64	0.03	0.00	0.02	2.31
10/16/2001	8.52	1.09	12.86	1.21	0.86
10/17/2001	5.80		0.00	0.15	2.31
10/18/2001	5.74		0.00	0.00	2.30
10/19/2001	5.55	0.01	0.00	0.00	2.24
10/20/2001	5.26		0.00	0.00	2.28
10/21/2001	5.23		0.00	0.00	2.26
10/22/2001	5.36	0.05	0.00	0.00	2.24
10/23/2001	6.52	0.49	3.56	0.00	1.81
10/24/2001	6.49	1.10	4.38	0.00	1.73
10/25/2001	5.96		0.00	0.00	2.34
10/26/2001	5.58	0.08	0.00	0.00	2.33
10/27/2001	5.41	0.06	0.00	0.00	2.32

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
10/28/2001	5.36		0.00	0.00	2.40
10/29/2001	5.37		0.00	0.00	2.28
10/30/2001	3.63		0.00	0.00	0.56
10/31/2001	4.37		0.00	0.00	1.14
11/01/2001	4.15	0.09	0.00	0.00	0.95
11/02/2001	7.28	0.86	6.26	0.00	1.54
11/03/2001	5.31		0.00	0.00	2.31
11/04/2001	5.34		0.00	0.00	2.29
11/05/2001	4.28		0.00	0.00	1.22
11/06/2001	4.06		0.00	0.00	0.90
11/07/2001	4.16		0.00	0.00	1.12
11/08/2001	4.53	0.09	0.00	0.00	1.06
11/09/2001	4.39		0.00	0.00	1.43
11/10/2001	3.62		0.00	0.00	0.73
11/11/2001	3.14		0.00	0.00	0.41
11/12/2001	4.49		0.00	0.00	1.43
11/13/2001	3.78		0.00	0.00	0.86
11/14/2001	4.44	0.21	0.28	0.00	0.71
11/15/2001	4.12		0.00	0.00	1.23
11/16/2001	3.45		0.00	0.00	0.47
11/17/2001	3.31		0.00	0.00	0.51
11/18/2001	3.34	0.01	0.00	0.00	0.42
11/19/2001	5.41	0.18	0.08	0.00	1.81
11/20/2001	4.12		0.00	0.00	1.08
11/21/2001	4.10		0.00	0.00	1.18
11/22/2001	3.37		0.00	0.00	0.69
11/23/2001	3.59	0.02	0.00	0.00	0.98
11/24/2001	4.79	0.15	0.98	0.00	1.29
11/25/2001	3.61	0.02	0.00	0.00	0.88
11/26/2001	4.36	0.05	0.00	0.00	1.42
11/27/2001	3.37	0.04	0.00	0.00	0.32
11/28/2001	4.24	0.13	0.00	0.00	1.39
11/29/2001	5.01	0.63	1.61	0.00	0.00
11/30/2001	6.73	0.12	3.08	0.00	1.79
12/01/2001	5.02	0.04	0.00	0.00	2.18
12/02/2001	4.73		0.00	0.00	2.03
12/03/2001	3.72		0.00	0.00	0.77
12/04/2001	3.96		0.00	0.00	1.18
12/05/2001	3.89	0.06	0.00	0.00	0.94
12/06/2001	3.26		0.00	0.00	0.07
12/07/2001	4.09		0.00	0.00	1.33
12/08/2001	3.84		0.00	0.00	1.12
12/09/2001	3.33		0.00	0.00	0.67
12/10/2001	3.61		0.00	0.00	0.80
12/11/2001	3.69		0.00	0.00	0.92
12/12/2001	4.49	0.25	0.00	0.00	1.05
12/13/2001	4.44	0.08	0.00	0.00	1.05
12/14/2001	5.55	0.32	3.58	0.00	1.33
12/15/2001	4.19		0.00	0.00	1.54
12/16/2001	3.67	0.13	0.00	0.00	0.75
12/17/2001	6.15	0.23	1.01	0.00	1.30
12/18/2001	3.45		0.00	0.00	0.40
12/19/2001	4.35	0.07	0.00	0.00	1.38
12/20/2001	3.51		0.00	0.00	0.48
12/21/2001	3.48		0.00	0.00	0.75
12/22/2001	4.61	0.18	2.03	0.00	1.06

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
12/23/2001	3.64	0.09	0.00	0.00	0.91
12/24/2001	3.92	0.18	0.00	0.00	1.36
12/25/2001	3.05	0.03	0.00	0.00	0.71
12/26/2001	3.51	0.02	0.00	0.00	0.74
12/27/2001	3.66	0.03	0.00	0.00	0.73
12/28/2001	3.59	0.01	0.00	0.00	0.88
12/29/2001	3.26	0.02	0.00	0.00	0.74
12/30/2001	2.92	0.02	0.00	0.00	0.37
12/31/2001	2.74		0.00	0.00	0.00
01/01/2002	2.52		0.00	0.00	0.00
01/02/2002	2.75	0.02	0.00	0.00	0.00
01/03/2002	2.92		0.00	0.00	0.00
01/04/2002	2.79		0.00	0.00	0.00
01/05/2002	2.64	0.18	0.00	0.00	0.00
01/06/2002	2.95	0.16	0.00	0.00	0.00
01/07/2002	4.20	0.21	0.00	0.00	1.54
01/08/2002	4.96		0.00	0.00	2.10
01/09/2002	5.66		0.00	0.00	2.12
01/10/2002	4.72		0.00	0.00	1.88
01/11/2002	3.06		0.00	0.00	0.47
01/12/2002	3.97	0.01	0.00	0.00	1.36
01/13/2002	2.90		0.00	0.00	0.39
01/14/2002	3.48	0.04	0.31	0.00	0.73
01/15/2002	3.25	0.02	0.00	0.00	0.68
01/16/2002	3.37	0.14	0.00	0.00	0.71
01/17/2002	4.37		0.00	0.00	1.56
01/18/2002	3.46		0.00	0.00	0.93
01/19/2002	2.40		0.00	0.00	0.00
01/20/2002	2.47		0.00	0.00	0.00
01/21/2002	3.23	0.03	0.00	0.00	0.51
01/22/2002	4.10		0.00	0.00	1.39
01/23/2002	4.08	0.06	0.00	0.00	1.37
01/24/2002	2.93		0.00	0.00	0.23
01/25/2002	3.84		0.00	0.00	1.16
01/26/2002	3.10		0.00	0.00	0.59
01/27/2002	3.41		0.00	0.00	0.95
01/28/2002	3.12		0.00	0.00	0.45
01/29/2002	4.16	0.23	0.16	0.00	1.11
01/30/2002	7.18	1.25	3.71	0.00	0.87
01/31/2002	8.60	0.63	6.16	0.00	0.50
02/01/2002	6.18		0.00	0.00	1.94
02/02/2002	4.93		0.00	0.00	2.07
02/03/2002	4.93		0.00	0.00	2.05
02/04/2002	4.22	0.19	0.00	0.00	1.39
02/05/2002	3.51		0.00	0.00	0.71
02/06/2002	3.45		0.00	0.00	0.60
02/07/2002	3.67		0.00	0.00	0.70
02/08/2002	3.13		0.00	0.00	0.29
02/09/2002	4.05		0.00	0.00	1.25
02/10/2002	3.87		0.00	0.00	1.20
02/11/2002	3.04		0.00	0.00	0.31
02/12/2002	3.90		0.00	0.00	1.12
02/13/2002	2.97		0.00	0.00	0.15
02/14/2002	3.95		0.00	0.00	1.14
02/15/2002	3.48		0.00	0.00	0.68
02/16/2002	3.61	0.04	0.00	0.00	0.82

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
02/17/2002	3.88	0.03	0.00	0.00	1.13
02/18/2002	3.58		0.00	0.00	0.70
02/19/2002	6.60	0.53	2.60	0.00	1.06
02/20/2002	7.22	0.52	7.03	0.00	1.17
02/21/2002	5.34	0.19	0.00	0.00	1.91
02/22/2002	3.96		0.00	0.00	0.84
02/23/2002	3.13		0.00	0.00	0.37
02/24/2002	3.98		0.00	0.00	1.24
02/25/2002	3.58	0.28	0.00	0.00	0.57
02/26/2002	4.72	0.45	0.00	0.00	0.60
02/27/2002	5.14	0.25	0.00	0.00	1.86
02/28/2002	3.66		0.00	0.00	0.57
03/01/2002	3.91		0.00	0.00	0.93
03/02/2002	6.31	1.29	6.76	0.00	0.77
03/03/2002	5.59	0.39	0.00	0.00	1.91
03/04/2002	4.96	0.03	0.00	0.00	1.92
03/05/2002	4.90	0.01	0.11	0.00	1.68
03/06/2002	5.22		3.85	0.00	0.36
03/07/2002	5.19		0.00	0.00	0.69
03/08/2002	6.87	0.29	3.90	0.00	1.15
03/09/2002	7.25	0.56	7.93	0.00	1.20
03/10/2002	5.26		0.00	0.00	1.97
03/11/2002	5.74		0.00	0.00	1.85
03/12/2002	5.41		0.00	0.00	1.92
03/13/2002	5.04		0.00	0.00	1.65
03/14/2002	4.90		0.00	0.00	1.29
03/15/2002	4.88	0.05	0.00	0.00	1.29
03/16/2002	4.45		0.00	0.00	1.26
03/17/2002	4.52	0.08	0.00	0.00	1.25
03/18/2002	4.47		0.00	0.00	0.69
03/19/2002	4.73	0.06	0.00	0.00	0.53
03/20/2002	5.76	0.04	0.00	0.00	1.36
03/21/2002	5.59	0.09	0.00	0.00	1.19
03/22/2002	5.33		0.00	0.00	1.28
03/23/2002	5.33		0.00	0.00	1.27
03/24/2002	4.64	0.13	0.00	0.00	0.74
03/25/2002	5.50	0.09	0.00	0.00	1.27
03/26/2002	5.47	0.20	0.00	0.00	1.28
03/27/2002	5.54		0.01	0.00	0.69
03/28/2002	5.74		0.00	0.00	1.68
03/29/2002	6.29	0.30	3.96	0.00	1.35
03/30/2002	5.59		0.00	0.00	1.89
03/31/2002	5.44	0.03	0.00	0.00	1.88
04/01/2002	5.27	0.22	2.23	0.00	0.77
04/02/2002	6.93	0.44	3.96	0.00	1.39
04/03/2002	5.71	0.05	0.33	0.00	1.86
04/04/2002	5.65	0.03	0.36	0.00	1.74
04/05/2002	5.37		0.63	0.00	1.78
04/06/2002	5.35		0.00	0.00	1.77
04/07/2002	4.47	0.07	0.00	0.00	0.68
04/08/2002	7.35	0.80	8.90	0.00	0.76
04/09/2002	5.62	0.13	0.00	0.00	1.76
04/10/2002	5.02		0.00	0.00	1.73
04/11/2002	5.97		0.00	0.00	1.40
04/12/2002	7.40		0.00	0.00	1.82
04/13/2002	7.13		0.00	0.00	1.85

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
04/14/2002	7.19		0.00	0.00	2.15
04/15/2002	6.01		0.00	0.00	0.92
04/16/2002	6.40		0.00	0.00	1.22
04/17/2002	6.36	0.05	0.00	0.00	1.31
04/18/2002	6.13		0.00	0.00	1.52
04/19/2002	6.01	0.97	1.35	0.00	0.95
04/20/2002	8.34	0.65	4.83	0.00	1.62
04/21/2002	7.97	0.30	2.66	0.00	1.87
04/22/2002	7.44		0.00	0.00	2.20
04/23/2002	7.31		0.00	0.00	2.28
04/24/2002	7.64	0.25	3.35	0.00	1.73
04/25/2002	7.48		0.00	0.00	2.19
04/26/2002	6.88		0.00	0.00	2.18
04/27/2002	7.22	0.70	7.21	0.00	1.36
04/28/2002	7.52	0.05	0.00	0.00	2.06
04/29/2002	7.29		0.00	0.00	2.16
04/30/2002	7.17		0.00	0.00	2.16
05/01/2002	7.30	0.04	0.00	0.00	2.10
05/02/2002	7.18	0.08	0.45	0.00	1.71
05/03/2002	5.80		0.00	0.00	1.04
05/04/2002	5.53		0.00	0.00	0.88
05/05/2002	5.78		0.00	0.00	1.30
05/06/2002	7.12	0.43	4.51	0.00	1.12
05/07/2002	7.14		0.00	0.00	2.35
05/08/2002	7.08	0.26	2.91	0.00	1.51
05/09/2002	7.96	0.82	4.03	0.00	1.78
05/10/2002	7.05		0.00	0.00	2.34
05/11/2002	7.74	1.23	7.40	0.00	1.41
05/12/2002	8.98	0.89	11.03	5.80	0.55
05/13/2002	7.30	0.04	0.00	0.30	2.21
05/14/2002	5.91		0.00	0.00	2.35
05/15/2002	5.84		0.00	0.00	2.30
05/16/2002	6.87	0.68	4.38	0.00	1.75
05/17/2002	5.99		0.00	0.00	2.31
05/18/2002	5.76		0.00	0.00	2.29
05/19/2002	5.76	0.02	0.00	0.00	2.25
05/20/2002	5.78		0.00	0.00	2.22
05/21/2002	5.70		0.00	0.00	2.19
05/22/2002	5.84		0.45	0.00	2.18
05/23/2002	5.95		0.00	0.00	2.22
05/24/2002	6.72	0.73	3.16	0.00	1.64
05/25/2002	5.00	0.04	0.00	0.00	1.36
05/26/2002	4.55		0.00	0.00	1.26
05/27/2002	5.24		0.00	0.00	1.83
05/28/2002	6.23	0.16	0.00	0.00	2.11
05/29/2002	6.09	0.05	0.00	0.00	2.21
05/30/2002	6.07		0.00	0.00	2.25
05/31/2002	5.38		0.00	0.00	1.64
06/01/2002	4.85		0.00	0.00	1.32
06/02/2002	4.26		0.00	0.00	0.87
06/03/2002	5.96	0.02	0.00	0.00	2.32
06/04/2002	4.99	0.05	0.13	0.00	1.46
06/05/2002	3.96	0.08	0.00	0.00	0.32
06/06/2002	4.98		0.83	0.00	1.45
06/07/2002	4.40		0.00	0.00	0.95
06/08/2002	4.90		0.00	0.00	1.55

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
06/09/2002	4.57		0.00	0.00	1.17
06/10/2002	4.78	0.16	0.00	0.00	1.18
06/11/2002	5.02	0.02	0.00	0.00	1.53
06/12/2002	4.21		0.00	0.00	0.50
06/13/2002	5.12		0.00	0.00	1.64
06/14/2002	6.09	0.20	0.68	0.00	1.76
06/15/2002	7.23		0.51	0.00	1.82
06/16/2002	5.45		0.00	0.00	1.11
06/17/2002	5.30	0.01	0.00	0.00	0.66
06/18/2002	5.85		0.00	0.00	1.28
06/19/2002	5.55		0.00	0.00	1.12
06/20/2002	5.21		0.00	0.00	1.15
06/21/2002	4.31		0.00	0.00	0.98
06/22/2002	4.24		0.00	0.00	1.22
06/23/2002	4.22		0.00	0.00	1.21
06/24/2002	3.80		0.00	0.00	0.52
06/25/2002	5.83	0.75	2.88	0.00	1.37
06/26/2002	5.76	0.02	0.00	0.00	2.37
06/27/2002	6.27	0.09	0.00	0.00	2.38
06/28/2002	5.12		0.00	0.00	1.95
06/29/2002	3.63		0.00	0.00	0.72
06/30/2002	4.11		0.00	0.00	1.08
07/01/2002	4.05		0.00	0.00	0.92
07/02/2002	4.13		0.00	0.00	0.99
07/03/2002	4.29		0.00	0.00	1.05
07/04/2002	3.69		0.00	0.00	0.77
07/05/2002	3.61		0.00	0.00	0.73
07/06/2002	3.63		0.00	0.00	0.85
07/07/2002	4.91		0.00	0.00	0.92
07/08/2002	5.84		0.00	0.00	0.83
07/09/2002	7.09	0.36	3.08	0.00	0.92
07/10/2002	5.93		0.00	0.00	1.10
07/11/2002	4.59		0.00	0.00	0.54
07/12/2002	4.36		0.00	0.00	1.43
07/13/2002	3.34		0.00	0.00	0.74
07/14/2002	4.66		0.00	0.00	0.75
07/15/2002	5.90		0.51	0.00	0.83
07/16/2002	5.97		0.00	0.00	0.84
07/17/2002	5.41		0.00	0.00	1.26
07/18/2002	3.89		0.00	0.00	0.83
07/19/2002	3.24		0.00	0.00	0.30
07/20/2002	3.44		0.00	0.00	0.79
07/21/2002	5.15		0.00	0.00	0.69
07/22/2002	7.69	1.47	4.63	0.00	0.96
07/23/2002	8.22		0.00	0.00	2.45
07/24/2002	7.92		0.00	0.00	2.34
07/25/2002	7.88	0.39	2.81	0.00	1.77
07/26/2002	7.46		0.00	0.00	2.14
07/27/2002	7.01	0.14	0.46	0.00	2.02
07/28/2002	6.32		0.00	0.00	1.92
07/29/2002	6.24	0.22	2.30	0.00	1.02
07/30/2002	5.83		0.00	0.00	1.31
07/31/2002	5.70		0.00	0.00	1.24
08/01/2002	5.83		0.00	0.00	1.26
08/02/2002	7.34	0.99	3.40	0.00	1.44
08/03/2002	6.34		0.00	0.00	1.88

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
08/04/2002	6.65		0.00	0.00	1.84
08/05/2002	6.37		0.00	0.00	1.78
08/06/2002	4.50		0.00	0.00	1.80
08/07/2002	3.66		0.00	0.00	1.05
08/08/2002	3.51		0.00	0.00	0.82
08/09/2002	3.30		0.00	0.00	0.63
08/10/2002	3.25		0.00	0.00	0.80
08/11/2002	3.22		0.00	0.00	0.67
08/12/2002	4.03		0.00	0.00	0.72
08/13/2002	6.30	0.47	3.43	0.00	0.55
08/14/2002	6.74	0.09	0.00	0.00	1.89
08/15/2002	5.32	0.01	0.00	0.00	0.76
08/16/2002	6.15	0.26	1.71	0.00	0.88
08/17/2002	5.50		0.00	0.00	1.07
08/18/2002	4.56		0.00	0.00	0.44
08/19/2002	6.69	0.44	2.71	0.00	1.30
08/20/2002	6.24		0.00	0.00	1.85
08/21/2002	4.69		0.00	0.00	0.49
08/22/2002	4.77	0.04	0.00	0.00	0.71
08/23/2002	5.19	0.02	0.00	0.00	1.00
08/24/2002	4.79	0.10	1.53	0.00	0.45
08/25/2002	4.48		0.00	0.00	0.70
08/26/2002	5.26		0.00	0.00	1.24
08/27/2002	3.95		0.00	0.00	0.18
08/28/2002	4.56		0.00	0.00	0.79
08/29/2002	4.23		0.00	0.00	0.53
08/30/2002	3.19		0.00	0.00	0.63
08/31/2002	3.02		0.00	0.00	0.67
09/01/2002	2.43		0.00	0.00	0.00
09/02/2002	5.54	0.37	2.13	0.00	1.42
09/03/2002	5.27		0.00	0.00	1.34
09/04/2002	4.74		0.06	0.00	0.82
09/05/2002	4.39		0.00	0.00	0.39
09/06/2002	4.26		0.00	0.00	0.49
09/07/2002	4.59		0.00	0.00	0.86
09/08/2002	4.05		0.00	0.00	0.47
09/09/2002	4.94		0.00	0.00	1.18
09/10/2002	3.83	0.04	0.00	0.00	0.00
09/11/2002	4.20		0.00	0.00	0.55
09/12/2002	4.07		0.00	0.00	0.37
09/13/2002	4.58		0.00	0.00	0.94
09/14/2002	3.77		0.00	0.00	0.44
09/15/2002	4.04	0.10	0.00	0.00	0.14
09/16/2002	4.73		0.00	0.00	0.77
09/17/2002	4.17		0.00	0.00	0.38
09/18/2002	4.20	0.09	0.00	0.00	0.10
09/19/2002	5.59	0.11	1.66	0.00	1.02
09/20/2002	5.59	0.20	1.55	0.00	0.97
09/21/2002	4.21		0.00	0.00	0.66
09/22/2002	4.38	0.11	0.00	0.00	0.55
09/23/2002	4.41		0.00	0.00	0.63
09/24/2002	4.02		0.00	0.00	0.39
09/25/2002	3.71		0.00	0.00	0.00
09/26/2002	5.34		0.00	0.00	1.22
09/27/2002	4.00		0.00	0.00	0.00
09/28/2002	4.83		0.00	0.00	0.91

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
09/29/2002	4.57	0.12	0.46	0.00	0.32
09/30/2002	4.79		0.00	0.00	0.92
10/01/2002	3.52		0.00	0.00	0.33
10/02/2002	3.33		0.00	0.00	0.95
10/03/2002	3.32		0.00	0.00	0.52
10/04/2002	5.13	0.76	3.21	0.00	0.80
10/05/2002	4.43		0.00	0.00	2.23
10/06/2002	4.55	0.01	0.00	0.00	2.20
10/07/2002	3.50		0.00	0.00	0.89
10/08/2002	2.65		0.00	0.00	0.30
10/09/2002	3.06		0.00	0.00	0.50
10/10/2002	3.34		0.00	0.00	0.49
10/11/2002	2.92		0.00	0.00	0.34
10/12/2002	2.86	0.26	0.30	0.00	0.31
10/13/2002	3.85		0.00	0.00	0.78
10/14/2002	2.97		0.00	0.00	0.56
10/15/2002	2.91		0.00	0.00	0.56
10/16/2002	2.43	0.04	0.00	0.00	0.00
10/17/2002	3.82	0.09	0.00	0.00	1.22
10/18/2002	2.64	0.08	0.00	0.00	0.30
10/19/2002	2.99		0.00	0.00	0.56
10/20/2002	2.71		0.00	0.00	0.52
10/21/2002	2.82		0.00	0.00	0.52
10/22/2002	3.05		0.00	0.00	0.55
10/23/2002	2.26		0.00	0.00	0.00
10/24/2002	3.86		0.00	0.00	1.15
10/25/2002	3.58	0.17	0.00	0.00	0.48
10/26/2002	3.06		0.00	0.00	0.68
10/27/2002	2.51		0.00	0.00	0.31
10/28/2002	2.89		0.00	0.00	0.49
10/29/2002	2.95		0.00	0.00	0.66
10/30/2002	2.65		0.00	0.00	0.36
10/31/2002	2.95	0.02	0.00	0.00	0.51
11/01/2002	2.84		0.00	0.00	0.62
11/02/2002	2.62		0.00	0.00	0.45
11/03/2002	2.83	0.03	0.00	0.00	0.43
11/04/2002	2.61		0.00	0.00	0.33
11/05/2002	3.91	0.27	0.00	0.00	0.94
11/06/2002	2.83	0.06	1.18	0.00	0.30
11/07/2002	2.62		0.00	0.00	0.28
11/08/2002	2.50		0.00	0.00	0.27
11/09/2002	4.09	0.50	2.93	0.00	0.90
11/10/2002	5.44	0.10	3.71	0.00	1.75
11/11/2002	2.85	0.02	0.00	0.00	0.57
11/12/2002	2.70		0.00	0.00	0.38
11/13/2002	3.13		0.00	0.00	0.88
11/14/2002	3.39	0.24	0.00	0.00	0.18
11/15/2002	3.43		0.00	0.00	0.83
11/16/2002	2.37		0.00	0.00	0.27
11/17/2002	2.52		0.00	0.00	0.42
11/18/2002	2.91	0.10	0.00	0.00	0.49
11/19/2002	3.80	0.10	0.00	0.00	0.80
11/20/2002	2.41		0.00	0.00	0.18
11/21/2002	4.40	0.34	1.30	0.00	0.35
11/22/2002	4.26	0.02	0.00	0.00	0.85
11/23/2002	2.69		0.00	0.00	0.54

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
11/24/2002	2.71	0.12	0.00	0.00	0.44
11/25/2002	3.30		0.00	0.00	0.90
11/26/2002	2.45	0.03	0.00	0.00	0.19
11/27/2002	2.55		0.00	0.00	0.20
11/28/2002	3.90		0.00	0.00	1.74
11/29/2002	2.52		0.00	0.00	0.46
11/30/2002	2.52	0.17	0.00	0.00	0.23
12/01/2002	2.44		0.00	0.00	0.26
12/02/2002	2.62	0.09	0.00	0.00	0.26
12/03/2002	2.37		0.00	0.00	0.00
12/04/2002	2.32		0.00	0.00	0.00
12/05/2002	4.37	0.02	0.00	0.00	1.97
12/06/2002	3.03		0.00	0.00	0.66
12/07/2002	2.46		0.00	0.00	0.25
12/08/2002	2.35		0.00	0.00	0.23
12/09/2002	2.43		0.00	0.00	0.13
12/10/2002	2.26		0.00	0.00	0.00
12/11/2002	2.26		0.00	0.00	0.00
12/12/2002	3.11		0.00	0.00	0.63
12/13/2002	3.33		0.00	0.00	1.07
12/14/2002	2.46		0.00	0.00	0.31
12/15/2002	2.26	0.01	0.00	0.00	0.00
12/16/2002	2.67		0.00	0.00	0.39
12/17/2002	3.58	0.18	0.00	0.00	1.13
12/18/2002	7.79	0.94	10.13	0.00	0.64
12/19/2002	5.27	0.08	0.00	0.00	2.22
12/20/2002	4.39	0.01	0.00	0.00	2.20
12/21/2002	2.40	0.37	0.00	0.00	0.09
12/22/2002	2.17	0.31	0.00	0.00	0.00
12/23/2002	3.37		0.00	0.00	1.15
12/24/2002	2.10		0.00	0.00	0.00
12/25/2002	2.22		0.06	0.00	0.34
12/26/2002	2.92		0.00	0.00	0.66
12/27/2002	2.31		0.00	0.00	0.00
12/28/2002	3.82		0.00	0.00	1.51
12/29/2002	3.99		0.00	0.00	1.68
12/30/2002	4.05	0.01	0.00	0.00	0.01
12/31/2002	2.31		0.00	0.00	0.00
01/01/2003	2.06		0.00	0.00	0.00
01/02/2003	2.31	0.09	0.00	0.00	0.00
01/03/2003	2.76	0.02	0.00	0.00	0.26
01/04/2003	3.57	0.09	0.00	0.00	1.33
01/05/2003	2.93	0.10	0.00	0.00	0.40
01/06/2003	2.62	0.04	0.00	0.00	0.00
01/07/2003	2.22		0.00	0.00	0.00
01/08/2003	2.90		0.00	0.00	0.14
01/09/2003	4.50	0.04	0.00	0.00	2.03
01/10/2003	3.66	0.08	0.00	0.00	1.45
01/11/2003	2.30	0.02	0.00	0.00	0.09
01/12/2003	2.21	0.02	0.00	0.00	0.00
01/13/2003	2.31		0.00	0.00	0.05
01/14/2003	2.26	0.25	0.00	0.00	0.00
01/15/2003	2.19		0.00	0.00	0.00
01/16/2003	2.33		0.00	0.00	0.00
01/17/2003	2.23	0.06	0.00	0.00	0.00
01/18/2003	2.15	0.03	0.00	0.00	0.00

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
01/19/2003	3.25		0.00	0.00	1.16
01/20/2003	3.01		0.00	0.00	0.64
01/21/2003	2.14	0.02	0.00	0.00	0.00
01/22/2003	2.13	0.49	0.00	0.00	0.00
01/23/2003	2.80	0.20	0.00	0.00	0.30
01/24/2003	2.19		0.00	0.00	0.00
01/25/2003	3.49	0.04	0.00	0.00	1.33
01/26/2003	3.62	0.40	0.00	0.00	1.38
01/27/2003	2.19		0.00	0.00	0.00
01/28/2003	2.29	0.03	0.00	0.00	0.00
01/29/2003	2.45		0.00	0.00	0.00
01/30/2003	2.34		0.00	0.00	0.00
01/31/2003	2.56	0.07	0.00	0.00	0.00
02/01/2003	4.68		0.00	0.00	1.51
02/02/2003	3.33		0.00	0.00	0.57
02/03/2003	4.60	0.30	3.33	0.00	0.16
02/04/2003	4.84	0.04	0.00	0.00	2.05
02/05/2003	2.21	0.02	0.00	0.00	0.01
02/06/2003	2.30		0.00	0.00	0.00
02/07/2003	2.53	0.02	0.00	0.00	0.26
02/08/2003	3.37		0.00	0.00	1.07
02/09/2003	2.07		0.00	0.00	0.03
02/10/2003	2.35	0.15	0.00	0.00	0.00
02/11/2003	2.11	0.03	0.00	0.00	0.00
02/12/2003	2.14		0.00	0.00	0.00
02/13/2003	2.44		0.00	0.00	0.00
02/14/2003	3.68	0.02	0.00	0.00	1.29
02/15/2003	3.13		0.00	0.00	0.83
02/16/2003	2.15		0.00	0.00	0.00
02/17/2003	2.82		0.00	0.00	0.39
02/18/2003	2.28		0.00	0.00	0.00
02/19/2003	2.35		0.00	0.00	0.00
02/20/2003	2.86		0.00	0.00	0.01
02/21/2003	2.51		0.00	0.00	0.00
02/22/2003	3.25	0.02	0.00	0.00	0.94
02/23/2003	3.38		0.00	0.00	1.33
02/24/2003	2.54	0.18	0.00	0.00	0.39
02/25/2003	2.27	0.01	0.00	0.00	0.00
02/26/2003	2.18		0.00	0.00	0.00
02/27/2003	2.25		0.00	0.00	0.00
02/28/2003	2.38		0.00	0.00	0.00
03/01/2003	3.00	0.01	0.00	0.00	0.00
03/02/2003	3.45	0.16	0.00	0.00	2.05
03/03/2003	2.24	0.02	0.00	0.00	0.00
03/04/2003	2.14	0.21	0.00	0.00	0.00
03/05/2003	2.33	0.24	0.00	0.00	0.00
03/06/2003	2.55	0.01	0.00	0.00	0.00
03/07/2003	2.34		0.00	0.00	0.00
03/08/2003	4.84	0.15	3.05	0.00	0.99
03/09/2003	3.91		0.00	0.00	1.70
03/10/2003	3.49	0.01	0.00	0.00	1.31
03/11/2003	3.72		0.00	0.00	1.31
03/12/2003	3.07		0.00	0.00	0.15
03/13/2003	4.84	0.30	5.13	0.00	0.01
03/14/2003	2.39		0.00	0.00	0.04
03/15/2003	3.76		0.00	0.00	1.29

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
03/16/2003	2.53		0.00	0.00	0.36
03/17/2003	2.20		0.00	0.00	0.00
03/18/2003	2.38		0.00	0.00	0.00
03/19/2003	3.01	0.05	0.00	0.00	0.76
03/20/2003	4.49	0.30	1.81	0.00	0.66
03/21/2003	3.55	0.02	0.00	0.00	1.23
03/22/2003	2.07		0.00	0.00	0.00
03/23/2003	2.08		0.00	0.00	0.00
03/24/2003	2.91		0.00	0.00	0.57
03/25/2003	3.52	0.14	0.00	0.00	0.29
03/26/2003	2.24	0.06	0.00	0.00	0.00
03/27/2003	3.44	0.04	0.00	0.00	0.93
03/28/2003	2.23	0.01	0.00	0.00	0.00
03/29/2003	2.00		0.00	0.00	0.00
03/30/2003	2.21		0.00	0.00	0.09
03/31/2003	2.94	0.06	0.00	0.00	0.75
04/01/2003	2.34		0.00	0.00	0.05
04/02/2003	2.49		0.00	0.00	0.20
04/03/2003	3.18	0.21	0.50	0.00	0.73
04/04/2003	7.46	1.78	10.26	0.04	0.41
04/05/2003	4.72		0.00	0.01	2.22
04/06/2003	4.33		0.00	0.00	2.14
04/07/2003	5.50	0.37	0.00	0.00	2.24
04/08/2003	4.69		0.00	0.00	2.16
04/09/2003	4.41		0.00	0.00	2.19
04/10/2003	2.66		0.00	0.00	0.43
04/11/2003	2.69		0.00	0.00	0.42
04/12/2003	2.35		0.00	0.00	0.35
04/13/2003	2.41		0.00	0.00	0.39
04/14/2003	2.54		0.00	0.00	0.19
04/15/2003	2.31		0.00	0.00	0.12
04/16/2003	2.83		0.00	0.00	0.68
04/17/2003	2.27		0.00	0.00	0.00
04/18/2003	2.12		0.00	0.00	0.00
04/19/2003	2.37		0.00	0.00	0.27
04/20/2003	5.71	0.57	4.63	0.00	1.47
04/21/2003	3.33	0.03	0.00	0.00	1.09
04/22/2003	1.95		0.00	0.00	0.00
04/23/2003	2.25		0.00	0.00	0.00
04/24/2003	3.31		0.00	0.00	1.00
04/25/2003	2.23		0.00	0.00	0.00
04/26/2003	2.17		0.00	0.00	0.00
04/27/2003	2.50		0.00	0.00	0.49
04/28/2003	2.57		0.00	0.00	0.41
04/29/2003	2.40		0.00	0.00	0.21
04/30/2003	5.23	0.73	5.35	0.00	0.92
05/01/2003	7.03	0.99	6.70	0.00	1.46
05/02/2003	4.60	0.01	0.00	0.00	2.23
05/03/2003	4.22		0.00	0.00	2.20
05/04/2003	4.54	0.65	1.50	0.00	1.98
05/05/2003	6.77	0.57	5.70	0.00	1.56
05/06/2003	4.37		0.00	0.00	2.13
05/07/2003	5.24	0.36	2.10	0.00	1.83
05/08/2003	4.60	0.01	0.00	0.00	2.18
05/09/2003	6.61	1.51	5.25	0.58	1.61
05/10/2003	4.69	0.06	0.00	0.00	2.26

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
05/11/2003	5.77	0.34	0.00	0.00	2.03
05/12/2003	4.89	0.07	0.00	0.00	2.26
05/13/2003	4.61		0.00	0.00	2.25
05/14/2003	5.08	0.21	0.66	0.00	2.02
05/15/2003	3.36		0.00	0.00	0.89
05/16/2003	2.56		0.00	0.00	0.37
05/17/2003	2.66		0.00	0.00	0.49
05/18/2003	2.06		0.00	0.00	0.00
05/19/2003	2.96		0.00	0.00	0.75
05/20/2003	6.30	0.57	2.28	0.00	1.72
05/21/2003	3.87		0.00	0.00	1.60
05/22/2003	3.87		0.00	0.00	0.20
05/23/2003	3.01		0.00	0.00	0.00
05/24/2003	2.15		0.00	0.00	0.06
05/25/2003	3.00		0.00	0.00	1.10
05/26/2003	2.13		0.00	0.00	0.05
05/27/2003	3.05		0.00	0.00	0.76
05/28/2003	2.36	0.08	0.00	0.00	0.00
05/29/2003	2.79		0.00	0.00	0.41
05/30/2003	2.89	0.38	2.10	0.00	0.09
05/31/2003	3.74	0.04	0.00	0.00	1.19
06/01/2003	2.77	0.00	0.00	0.00	0.56
06/02/2003	3.17	0.03	0.00	0.00	0.90
06/03/2003	4.79	0.47	3.40	0.00	0.93
06/04/2003	3.19	0.01	0.00	0.00	0.94
06/05/2003	3.57		0.00	0.00	1.29
06/06/2003	4.02	0.08	0.00	0.00	1.74
06/07/2003	2.49		0.00	0.00	0.34
06/08/2003	2.73	0.23	0.96	0.00	0.00
06/09/2003	2.20		0.00	0.00	0.04
06/10/2003	2.27	0.05	0.00	0.00	0.01
06/11/2003	2.45	0.03	0.00	0.00	0.27
06/12/2003	5.07	0.22	2.01	0.00	1.55
06/13/2003	3.90	0.15	0.61	0.00	1.06
06/14/2003	3.13		0.00	0.00	1.11
06/15/2003	2.96		0.00	0.00	0.99
06/16/2003	2.32		0.00	0.00	0.06
06/17/2003	2.12		0.00	0.00	0.00
06/18/2003	3.40	0.44	2.41	0.00	0.08
06/19/2003	4.21		0.00	0.00	1.79
06/20/2003	3.87		0.00	0.00	1.78
06/21/2003	3.01		0.00	0.00	1.00
06/22/2003	2.10		0.00	0.00	0.00
06/23/2003	2.17		0.00	0.00	0.00
06/24/2003	2.13		0.00	0.00	0.00
06/25/2003	2.28		0.00	0.00	0.00
06/26/2003	2.76	0.20	0.50	0.00	0.00
06/27/2003	2.09		0.00	0.00	0.00
06/28/2003	2.25	0.16	0.00	0.00	0.00
06/29/2003	2.03		0.00	0.00	0.00
06/30/2003	2.68		0.00	0.00	0.58
07/01/2003	2.14		0.00	0.00	0.00
07/02/2003	2.57		0.00	0.00	0.53
07/03/2003	2.19		0.00	0.00	0.00
07/04/2003	2.28		0.00	0.00	0.23
07/05/2003	4.32	0.62	2.50	0.00	1.07

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
07/06/2003	5.44	0.85	4.35	0.00	1.41
07/07/2003	5.85	1.24	2.80	0.00	1.58
07/08/2003	5.94	0.44	5.83	2.45	0.00
07/09/2003	4.32	0.06	0.00	0.28	0.00
07/10/2003	4.53	0.16	0.00	0.00	0.00
07/11/2003	4.17		0.00	0.00	0.00
07/12/2003	3.86		0.00	0.00	0.00
07/13/2003	3.85		0.00	0.00	0.00
07/14/2003	3.91		0.00	0.00	0.00
07/15/2003	4.44	0.19	1.06	0.00	0.00
07/16/2003	3.69		0.00	0.00	0.00
07/17/2003	2.64		0.00	0.00	0.00
07/18/2003	2.10		0.00	0.00	0.00
07/19/2003	2.06		0.00	0.00	0.00
07/20/2003	2.31	0.10	0.00	0.00	0.00
07/21/2003	4.77	0.46	2.25	0.00	0.00
07/22/2003	2.81		0.00	0.00	0.00
07/23/2003	2.66		0.00	0.00	0.00
07/24/2003	2.17		0.00	0.00	0.00
07/25/2003	2.24		0.00	0.00	0.00
07/26/2003	2.44		0.00	0.00	0.00
07/27/2003	3.89	0.44	3.28	0.00	0.00
07/28/2003	3.19		0.00	0.00	0.00
07/29/2003	2.14		0.00	0.00	0.00
07/30/2003	2.57		0.00	0.00	0.00
07/31/2003	2.60		0.00	0.00	0.00
08/01/2003	2.44	0.05	0.00	0.00	0.00
08/02/2003	2.20		0.00	0.00	0.00
08/03/2003	2.37	0.11	0.00	0.00	0.00
08/04/2003	2.10		0.00	0.00	0.00
08/05/2003	2.48		0.00	0.00	0.00
08/06/2003	2.69		0.00	0.00	0.00
08/07/2003	2.08		0.00	0.00	0.00
08/08/2003	2.09		0.00	0.00	0.00
08/09/2003	2.01		0.00	0.00	0.00
08/10/2003	1.85		0.00	0.00	0.00
08/11/2003	2.89		0.00	0.00	0.00
08/12/2003	2.98	0.04	0.00	0.00	0.00
08/13/2003	2.13		0.00	0.00	0.00
08/14/2003	2.19		0.00	0.00	0.00
08/15/2003	2.32		0.00	0.00	0.00
08/16/2003	2.02		0.00	0.00	0.00
08/17/2003	1.97		0.00	0.00	0.00
08/18/2003	2.20		0.00	0.00	0.00
08/19/2003	2.41		0.00	0.00	0.00
08/20/2003	2.69		0.00	0.00	0.00
08/21/2003	2.81		0.00	0.00	0.00
08/22/2003	2.20		0.00	0.00	0.00
08/23/2003	2.43		0.00	0.00	0.00
08/24/2003	2.34		0.00	0.00	0.00
08/25/2003	2.37		0.00	0.00	0.00
08/26/2003	4.07	0.39	2.13	0.00	0.00
08/27/2003	4.22		0.00	0.00	0.00
08/28/2003	2.36		0.00	0.00	0.00
08/29/2003	4.11	0.74	2.65	0.00	0.00
08/30/2003	3.32		0.00	0.00	0.00

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
08/31/2003	3.52	0.53	1.31	0.00	0.00
09/01/2003	7.51	0.81	7.36	0.00	0.00
09/02/2003	4.32		0.00	0.00	0.00
09/03/2003	2.13		0.00	0.00	0.00
09/04/2003	2.29		0.00	0.00	0.00
09/05/2003	2.14		0.00	0.00	0.00
09/06/2003	1.91		0.00	0.00	0.00
09/07/2003	2.39		0.00	0.00	0.00
09/08/2003	2.81		0.00	0.00	0.00
09/09/2003	2.14		0.00	0.00	0.00
09/10/2003	2.17		0.00	0.00	0.00
09/11/2003	2.36		0.00	0.00	0.00
09/12/2003	2.75		0.00	0.00	0.00
09/13/2003	2.07		0.00	0.00	0.00
09/14/2003	2.87	0.22	0.98	0.00	0.00
09/15/2003	2.85		0.00	0.00	0.00
09/16/2003	2.11		0.00	0.00	0.00
09/17/2003	2.64		0.00	0.00	0.00
09/18/2003	2.64		0.00	0.00	0.00
09/19/2003	2.29		0.00	0.00	0.00
09/20/2003	2.16		0.00	0.00	0.00
09/21/2003	2.02		0.00	0.00	0.00
09/22/2003	5.32	0.53	2.16	0.00	0.00
09/23/2003	3.11	0.11	0.00	0.00	0.00
09/24/2003	2.51	0.02	0.00	0.00	0.00
09/25/2003	2.11		0.00	0.00	0.00
09/26/2003	3.92	0.32	1.83	0.00	0.00
09/27/2003	2.58		0.00	0.00	0.00
09/28/2003	2.42	0.30	0.80	0.00	0.00
09/29/2003	4.63	0.12	0.53	0.00	0.00
09/30/2003	2.36		0.00	0.00	0.00
10/01/2003	2.26		0.00	0.00	0.00
10/02/2003	2.36	0.01	0.00	0.00	0.00
10/03/2003	3.49	0.21	0.76	0.00	0.00
10/04/2003	2.20		0.00	0.00	0.00
10/05/2003	2.35		0.00	0.00	0.00
10/06/2003	2.15		0.00	0.00	0.00
10/07/2003	2.25		0.00	0.00	0.00
10/08/2003	2.26		0.00	0.00	0.00
10/09/2003	3.22		0.00	0.00	0.00
10/10/2003	3.02		0.00	0.00	0.00
10/11/2003	2.11		0.00	0.00	0.00
10/12/2003	2.05	0.02	0.00	0.00	0.00
10/13/2003	2.34		0.00	0.00	0.00
10/14/2003	6.78	1.40	10.25	0.00	0.00
10/15/2003	4.46		0.00	0.00	0.00
10/16/2003	4.68	0.02	0.00	0.00	0.00
10/17/2003	3.75		0.00	0.00	0.00
10/18/2003	2.18		0.00	0.00	0.00
10/19/2003	2.94		0.00	0.00	0.00
10/20/2003	2.34		0.00	0.00	0.00
10/21/2003	2.65		0.00	0.00	0.00
10/22/2003	2.03		0.00	0.00	0.00
10/23/2003	2.82		1.33	0.00	0.00
10/24/2003	2.23		0.00	0.00	0.00
10/25/2003	5.33	0.80	4.73	0.00	0.77

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
10/26/2003	4.16		0.00	0.00	1.93
10/27/2003	4.09		0.00	0.00	1.82
10/28/2003	4.13	0.20	0.00	0.00	1.38
10/29/2003	2.37	0.02	0.00	0.00	0.04
10/30/2003	2.32		0.00	0.00	0.00
10/31/2003	2.17		0.00	0.00	0.00
11/01/2003	2.01	0.02	0.00	0.00	0.00
11/02/2003	3.44	0.30	1.11	0.00	0.00
11/03/2003	2.96	0.12	0.00	0.00	0.00
11/04/2003	2.66	0.39	0.50	0.00	0.12
11/05/2003	5.74	0.55	4.38	0.00	1.50
11/06/2003	3.97		0.00	0.00	1.89
11/07/2003	3.97		0.00	0.00	1.86
11/08/2003	2.55		0.00	0.00	0.46
11/09/2003	2.07		0.00	0.00	0.00
11/10/2003	2.42	0.03	0.00	0.00	0.00
11/11/2003	2.85	0.09	0.00	0.00	0.47
11/12/2003	2.39		0.00	0.00	0.24
11/13/2003	2.50		0.00	0.00	0.00
11/14/2003	2.37		0.00	0.00	0.12
11/15/2003	2.10	0.05	0.00	0.00	0.14
11/16/2003	2.17	0.08	0.00	0.00	0.05
11/17/2003	2.23	0.09	0.00	0.00	0.00
11/18/2003	8.40	1.18	12.68	0.00	0.00
11/19/2003	4.18		0.00	0.00	2.24
11/20/2003	4.14		0.00	0.00	1.84
11/21/2003	2.60		0.00	0.00	0.27
11/22/2003	2.22	0.98	0.00	0.00	0.00
11/23/2003	4.77		8.25	0.00	0.00
11/24/2003	4.80		0.53	0.00	1.76
11/25/2003	3.76		0.00	0.00	1.37
11/26/2003	4.26	0.08	0.00	0.00	1.83
11/27/2003	3.02	0.02	0.00	0.00	1.83
11/28/2003	2.16	0.02	0.00	0.00	1.03
11/29/2003	2.25		0.00	0.00	0.01
11/30/2003	2.19		0.00	0.00	0.00
12/01/2003	2.25		0.00	0.00	0.00
12/02/2003	2.29		0.00	0.00	0.00
12/03/2003	2.10		0.00	0.00	0.00
12/04/2003	2.76	0.09	0.00	0.00	0.40
12/05/2003	4.91	0.37	1.93	0.00	0.70
12/06/2003	2.26	0.01	0.00	0.00	0.00
12/07/2003	2.18		0.00	0.00	0.00
12/08/2003	3.43		0.00	0.00	1.09
12/09/2003	2.63	0.07	0.00	0.00	0.00
12/10/2003	5.90	0.47	3.60	0.00	0.98
12/11/2003	3.38		0.00	0.00	0.93
12/12/2003	2.17		0.00	0.00	0.00
12/13/2003	2.03		0.00	0.00	0.00
12/14/2003	2.13	0.02	0.00	0.00	0.00
12/15/2003	2.13		0.00	0.00	0.00
12/16/2003	2.16	0.04	0.00	0.00	0.00
12/17/2003	2.04	0.04	0.00	0.00	0.00
12/18/2003	2.15	0.01	0.00	0.00	0.01
12/19/2003	4.17	0.08	0.00	0.00	1.80
12/20/2003	2.48		0.00	0.00	0.43

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
12/21/2003	2.18		0.00	0.00	0.00
12/22/2003	2.22		0.00	0.00	0.01
12/23/2003	2.40	0.63	0.00	0.00	0.00
12/24/2003	2.13	0.04	0.00	0.00	0.00
12/25/2003	1.77		0.00	0.00	0.00
12/26/2003	1.97		0.00	0.00	0.00
12/27/2003	2.30		0.00	0.00	0.00
12/28/2003	3.40	0.16	0.00	0.00	0.45
12/29/2003	4.31	0.08	0.00	0.00	0.86
12/30/2003	2.43		0.00	0.00	0.33
12/31/2003	1.95		0.00	0.00	0.00
01/01/2004	2.10	0.10	0.00	0.00	0.21
01/02/2004	1.95	0.02	0.00	0.00	0.00
01/03/2004	2.55		0.00	0.00	0.55
01/04/2004	2.12	0.18	0.00	0.00	0.00
01/05/2004	2.44	0.16	0.00	0.00	0.00
01/06/2004	2.05		0.00	0.00	0.00
01/07/2004	1.99		0.00	0.00	0.00
01/08/2004	2.17		0.00	0.00	0.00
01/09/2004	2.13		0.00	0.00	0.00
01/10/2004	1.97		0.00	0.00	0.00
01/11/2004	2.29		0.00	0.00	0.31
01/12/2004	4.29	0.02	0.00	0.00	1.87
01/13/2004	2.82		0.00	0.00	0.79
01/14/2004	1.96		0.00	0.00	0.00
01/15/2004	2.17	0.07	0.00	0.00	0.00
01/16/2004	2.00		0.00	0.00	0.00
01/17/2004	1.89	0.11	0.00	0.00	0.00
01/18/2004	2.00	0.17	0.00	0.00	0.06
01/19/2004	2.11	0.23	0.00	0.00	0.00
01/20/2004	2.18	0.01	0.00	0.00	0.00
01/21/2004	2.16		0.00	0.00	0.00
01/22/2004	2.11	0.03	0.00	0.00	0.00
01/23/2004	1.95	0.16	0.00	0.00	0.00
01/24/2004	2.11		0.00	0.00	0.00
01/25/2004	1.95		0.00	0.00	0.00
01/26/2004	1.97	0.01	0.00	0.00	0.00
01/27/2004	2.07	0.28	0.00	0.00	0.00
01/28/2004	2.04		0.00	0.00	0.00
01/29/2004	2.08	0.01	0.00	0.00	0.00
01/30/2004	2.07		0.00	0.00	0.00
01/31/2004	1.96		0.00	0.00	0.00
02/01/2004	2.48		0.00	0.00	0.57
02/02/2004	2.38	0.17	0.00	0.00	0.06
02/03/2004	2.32	0.03	0.00	0.00	0.00
02/04/2004	2.42		0.00	0.00	0.28
02/05/2004	2.58	0.07	0.00	0.00	0.36
02/06/2004	3.10	0.03	0.00	0.00	0.91
02/07/2004	3.51	0.19	0.00	0.00	1.29
02/08/2004	2.41		0.00	0.00	0.37
02/09/2004	2.23		0.00	0.00	0.00
02/10/2004	2.11	0.02	0.00	0.00	0.00
02/11/2004	2.35		0.00	0.00	0.00
02/12/2004	2.26		0.00	0.00	0.00
02/13/2004	2.18		0.00	0.00	0.00
02/14/2004	2.21		0.00	0.00	0.00

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
02/15/2004	1.99		0.00	0.00	0.00
02/16/2004	2.06		0.00	0.00	0.00
02/17/2004	2.09		0.00	0.00	0.00
02/18/2004	2.30		0.00	0.00	0.00
02/19/2004	2.90		0.00	0.00	0.00
02/20/2004	4.31	0.25	1.28	0.00	0.27
02/21/2004	4.70	0.13	0.00	0.00	1.84
02/22/2004	3.47		0.00	0.00	0.95
02/23/2004	2.40	0.04	0.00	0.00	0.00
02/24/2004	2.25		0.00	0.00	0.00
02/25/2004	2.26		0.00	0.00	0.00
02/26/2004	2.41		0.00	0.00	0.00
02/27/2004	2.15		0.00	0.00	0.00
02/28/2004	2.05		0.00	0.00	0.00
02/29/2004	2.15		0.00	0.00	0.00
03/01/2004	5.69	0.81	6.40	0.00	0.55
03/02/2004	4.24		0.00	0.00	1.83
03/03/2004	3.78	0.05	0.00	0.00	1.46
03/04/2004	4.25	0.96	6.26	0.00	0.31
03/05/2004	5.92	0.33	6.03	0.00	1.31
03/06/2004	3.98		0.00	0.00	1.84
03/07/2004	4.04	0.09	0.00	0.00	1.81
03/08/2004	4.05		0.00	0.00	1.80
03/09/2004	3.23		0.00	0.00	1.04
03/10/2004	2.20		0.00	0.00	0.00
03/11/2004	2.71	0.02	0.00	0.00	0.59
03/12/2004	2.14		0.00	0.00	0.00
03/13/2004	2.02		0.00	0.00	0.00
03/14/2004	2.10	0.07	0.00	0.00	0.00
03/15/2004	2.84	0.01	0.00	0.00	0.75
03/16/2004	2.09		0.00	0.00	0.00
03/17/2004	2.65	0.06	0.00	0.00	0.00
03/18/2004	2.81	0.13	0.00	0.00	0.20
03/19/2004	3.26		0.00	0.00	0.85
03/20/2004	2.20	0.02	0.00	0.00	0.00
03/21/2004	2.22	0.09	0.00	0.00	0.00
03/22/2004	2.34	0.01	0.00	0.00	0.00
03/23/2004	3.19		0.00	0.00	0.43
03/24/2004	4.13	0.23	0.56	0.00	0.75
03/25/2004	3.19	0.28	0.08	0.00	0.00
03/26/2004	5.58	0.49	3.68	0.00	0.96
03/27/2004	4.04		0.00	0.00	1.77
03/28/2004	2.85	0.15	0.00	0.00	0.85
03/29/2004	2.63		0.00	0.00	0.00
03/30/2004	3.96	0.60	2.93	0.00	0.29
03/31/2004	3.53		0.00	0.00	1.44
04/01/2004	3.32		0.00	0.00	1.16
04/02/2004	2.10		0.00	0.00	0.00
04/03/2004	1.91		0.00	0.00	0.00
04/04/2004	1.85		0.00	0.00	0.00
04/05/2004	3.15		0.00	0.00	0.93
04/06/2004	2.76		0.00	0.00	0.70
04/07/2004	1.99		0.00	0.00	0.00
04/08/2004	2.24		0.00	0.00	0.00
04/09/2004	1.94		0.00	0.00	0.00
04/10/2004	1.92		0.00	0.00	0.00

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
04/11/2004	1.95		0.00	0.00	0.00
04/12/2004	2.08		0.00	0.00	0.01
04/13/2004	3.37		0.00	0.00	1.17
04/14/2004	2.92		0.00	0.00	0.73
04/15/2004	2.22		0.00	0.00	0.00
04/16/2004	1.98		0.00	0.00	0.00
04/17/2004	4.90	0.51	2.18	0.00	1.63
04/18/2004	2.74		0.00	0.00	0.81
04/19/2004	2.07		0.00	0.00	0.00
04/20/2004	3.36	0.13	0.00	0.00	0.73
04/21/2004	2.21		0.00	0.00	0.05
04/22/2004	2.22		0.00	0.00	0.00
04/23/2004	2.32		0.00	0.00	0.00
04/24/2004	2.32		0.00	0.00	0.33
04/25/2004	4.16	0.41	2.01	0.00	0.99
04/26/2004	2.32	0.02	0.00	0.00	0.00
04/27/2004	2.05		0.00	0.00	0.00
04/28/2004	2.04		0.00	0.00	0.00
04/29/2004	3.04		0.00	0.00	0.80
04/30/2004	2.83	0.41	1.85	0.00	0.00
05/01/2004	4.57	0.39	1.13	0.00	1.13
05/02/2004	3.14	0.11	0.00	0.00	0.02
05/03/2004	2.15		0.00	0.00	0.00
05/04/2004	2.08		0.00	0.00	0.00
05/05/2004	2.09		0.00	0.00	0.00
05/06/2004	2.74		0.00	0.00	0.74
05/07/2004	2.44	0.05	0.00	0.00	0.31
05/08/2004	1.97		0.00	0.00	0.00
05/09/2004	1.98	0.05	0.00	0.00	0.08
05/10/2004	3.95	0.37	3.08	0.00	0.46
05/11/2004	4.59		0.00	0.00	2.15
05/12/2004	2.44	0.11	0.00	0.00	0.42
05/13/2004	4.39	0.37	1.63	0.00	0.62
05/14/2004	4.68	0.64	3.26	0.00	1.10
05/15/2004	3.50	0.02	0.00	0.00	1.54
05/16/2004	1.95		0.00	0.00	0.00
05/17/2004	2.27		0.00	0.00	0.00
05/18/2004	4.20	0.49	1.85	0.00	0.72
05/19/2004	3.29		0.00	0.00	1.16
05/20/2004	2.75	0.26	0.00	0.00	0.44
05/21/2004	5.18	0.25	3.05	0.00	1.24
05/22/2004	4.60	0.46	2.86	0.00	1.33
05/23/2004	4.15	0.30	0.90	0.00	1.87
05/24/2004	3.93		0.45	0.00	0.94
05/25/2004	5.04	0.44	2.40	0.00	1.63
05/26/2004	2.43		2.08	0.00	0.31
05/27/2004	3.22		0.00	0.00	0.97
05/28/2004	2.28		0.00	0.00	0.06
05/29/2004	2.27		0.00	0.00	0.00
05/30/2004	4.85	1.26	5.31	0.00	0.60
05/31/2004	6.07	0.48	1.83	0.00	2.30
06/01/2004	5.24		0.00	0.00	2.87
06/02/2004	4.66		0.00	0.00	2.44
06/03/2004	3.35		0.00	0.00	1.06
06/04/2004	2.19		0.00	0.00	0.00
06/05/2004	2.23		0.00	0.00	0.00

LaPorte CSO Overflow Data					
Date	Plant Influent Flow MGD	Rain inches	Bypass to CSO Lagoon hours	CSO Lagoon Overflow MGD	CSO Lagoon Return Pump MGD
06/06/2004	2.13		0.00	0.00	0.03
06/07/2004	2.38		0.00	0.00	0.04
06/08/2004	2.29		0.00	0.00	0.04
06/09/2004	3.06		0.00	0.00	0.87
06/10/2004	4.16	0.88	2.78	0.00	0.08
06/11/2004	6.94	0.39	4.45	0.00	1.94
06/12/2004	6.59	1.18	5.36	0.00	2.03
06/13/2004	5.20	0.21	0.90	0.00	2.50
06/14/2004	5.89	0.27	2.81	0.00	2.34
06/15/2004	4.97		0.00	0.00	2.71
06/16/2004	3.91		0.00	0.00	1.59
06/17/2004	2.39	0.02	0.00	0.00	0.00
06/18/2004	2.64		0.00	0.00	0.50
06/19/2004	3.21		0.00	0.00	0.97
06/20/2004	2.00		0.00	0.00	0.00
06/21/2004	3.62	0.35	1.61	0.00	0.34
06/22/2004	3.18		0.00	0.00	0.85
06/23/2004	2.27		0.00	0.00	0.00
06/24/2004	2.41		0.00	0.00	0.00
06/25/2004	2.37		0.00	0.00	0.00
06/26/2004	2.13		0.00	0.00	0.00
06/27/2004	3.00		0.00	0.00	0.92
06/28/2004	3.33	0.04	0.00	0.00	0.99
06/29/2004	2.28		0.00	0.00	0.00
06/30/2004	2.27		0.00	0.00	0.00
07/01/2004	2.54		0.00	0.00	0.00
07/02/2004	2.26		0.00	0.00	0.00
07/03/2004	3.29		1.83	0.00	0.32
07/04/2004	4.39		1.00	0.00	1.41
07/05/2004	2.05		0.00	0.00	0.00
07/06/2004	2.96		8.75	0.00	0.67
07/07/2004	4.12		0.00	0.00	1.82
07/08/2004	2.87		0.00	0.00	0.60
07/09/2004	2.24		0.00	0.00	0.00
07/10/2004	2.55		0.53	0.00	0.07
07/11/2004	3.62		1.77	0.00	0.80
07/12/2004	3.29		0.00	0.00	1.08
07/13/2004	3.66		2.40	0.00	0.69
07/14/2004	5.40		0.60	0.00	2.57
07/15/2004	4.19		0.00	0.00	1.87
07/16/2004	4.27		1.62	0.00	1.12
07/17/2004	2.89		0.00	0.00	0.53
07/18/2004	2.90		0.00	0.00	0.78
07/19/2004	3.22		0.00	0.00	0.89
07/20/2004	3.10		0.00	0.00	0.90
07/21/2004	4.10		5.58	0.00	0.19
07/22/2004	6.35		2.13	0.00	2.44
07/23/2004	4.90		0.00	0.00	2.80
07/24/2004	4.53		0.00	0.00	2.46
07/25/2004	4.12		0.00	0.00	2.00
07/26/2004	3.17		0.00	0.00	0.81
07/27/2004	2.41		0.00	0.00	0.21
07/28/2004	2.39		0.00	0.00	0.01
07/29/2004	2.32		0.00	0.00	0.00
07/30/2004	3.35		0.00	0.00	0.89
07/31/2004	2.21		0.00	0.00	0.02

United States Department of the Interior
Fish and Wildlife Service

Bloomington Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

April 20, 2004

Mr. James McMahon
City of LaPorte WWTP
2101 Boyd Boulevard
LaPorte, Indiana 46350

Project: LaPorte CSO Long Term Control Plan
Waterway: Travis/Long Ditch
Location: LaPorte, LaPorte County

Dear Mr. McMahon:

This responds to your e-mail dated April 9, 2004, requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The City of LaPorte is currently evaluating its combined sanitary/storm sewer system and the impacts of discharges from this system on the receiving stream, Travis Ditch (called Long Ditch for about its last 3 miles before the confluence with the Kankakee River). Pollution abatement options are being considered. You have requested information on federally endangered species or other significant resources in the project area which may be affected by combined sewer discharges and abatement options.

The proposed project is within the range of the Federally endangered Indiana bat (<u>Myotis sodalis</u>) and Mitchell's satyr butterfly(<u>Neonympha mitchelli</u>) and the threatened bald eagle (<u>Haliaeetus leucocephalus</u>).

The Mitchell's satyr is found in a specific wetland within LaPorte County and is not located near the City of LaPorte or along Travis/Long Ditch.

Bald eagles do not currently nest in northern Indiana. However, they may be seen occasionally in LaPorte County as incidental visitors, particularly during the winter. There is no specific habitat available for this species along Travis Ditch, although bald eagles are often observed in appropriate habitats along the Kankakee River, including Kingsbury State Fish and Wildlife Area.

The Indiana bat utilizes wooded riparian areas and adjacent wooded uplands as its summer nursery habitat. Maternity colonies roost under loose bark of trees and feed along stream corridors. Adult female Indiana bats exhibit strong site fidelity to summer roosting and foraging areas; that is, they return to the same summer range annually to bear their young. The have been found throughout Indiana in suitable habitats and may be present along Travis Ditch in the project area.

During summer 2000, mist net surveys for Indiana bats were conducted at the Kingsbury Local Training Area, in the southcentral portion of the former Kingsbury Ordinance Plant, at the former Army Reserve Center along Hupp Road, and at the former White Oak Park, also along Hupp Road. No Indiana bats were found. However, no surveys were conducted along Travis Ditch, which contains suitable habitat along several miles of its length, particularly in the section between CR 500 South and US 35, but also possibly between CR 300 South and CR 500 South.

Based upon mist netting surveys along the Kankakee River in 1982, it is known that Indiana bats are present at the Kingsbury State Fish and Wildlife Area. The survey site was at the mouth of Breckenridge Ditch where CR 600 East meets the Kankakee River, so it is 5 or more miles east of the suitable habitat along Travis Ditch. Adult female Indiana bats are known to fly as much as 2.5 miles from the roost tree while foraging for food at night. Therefore, it is unlikely that a maternity colony near Breckenridge Ditch would utilize Travis Ditch. However, it is not unlikely that there could be additional Indiana bat colonies elsewhere within Kingsbury State Fish and Wildlife Area and adjacent private lands, particularly along or near Travis Ditch.

Although CSO discharges would not directly impact Indiana bat habitat, water pollution could impact the bat's insect food source. Reducing pollution discharges could therefore benefit this species if it is present.

The proposed project is also within the range of the eastern massasauga rattlesnake (Sistrurus catenatus catenatus), which has been listed as a Candidate for possible future listing as either threatened or endangered. Candidate species are those for which sufficient information on their biological status exists to warrant listing but for which listing has not yet occurred. Although this species is present in LaPorte County, it is not known from the City of LaPorte or the area along Travis/Long Ditch.

These endangered species comments constitute informal consultation only. They do not fulfill the requirements of Section 7 of the Endangered Species Act of 1973, as amended.

There is a Wetland Reserve Program (WRP) wetland near the confluence of Travis/Long Ditch with the Kankakee River, and several others in Starke County just downstream along the Kankakee. Although waterfowl hunting and other similar uses occur at these areas, and fishing occurs at the Travis/Long Ditch site, we do not know if there is primarily contact water use as well. Please contact Theresa Wojkovich at the LaPorte County office of the USDA Natural Resources Conservation Service for information about these WRP sites.

We appreciate the opportunity to comment at this early stage of project planning. If you have any questions about our comments, please contact Elizabeth McCloskey at (219) 983-9753 or elizabeth_mccloskey@fws.gov.

Sincerely yours,

Elizabeth S. McCloskey
Acting
for Scott E. Pruitt
Supervisor

cc: Dave Tennis, IDEM, Office of Water Management, Indianapolis, IN
Christie Kiefer, Environmental Coordinator, Division of Water, Indianapolis, IN
Peter Swenson, USEPA, NPDES Programs Branch, WN-16J, Chicago, IL
Theresa Wojkovich, NRCS, LaPorte, IN

From: Swenson.Peter@epamail.epa.gov <Swenson.Peter@epamail.epa.gov>
Subject: Fw: City of La Porte, IN sensitive areas query
Date: Fri, 09 Apr 2004 14:36:10 -0500
To: James McMahon <jmcmahon@cityoflaporte.com>
<Holst.Linda@epamail.epa.gov>
<Spaulding.William@epamail.epa.gov>
CC:
BCC:

Mr. McMahon, (also Bill Spaulding, and Linda Holst)

Thank you for your inquiry on sensitive areas.

I don't believe generally, that USEPA will have much information relating to sensitive areas in Travis Ditch, but have a few suggestions:

It's possible that USEPA may have information on drinking water sources and I am copying Bill Spaulding of our Drinking Water Branch to see if that is the case, or if he can suggest other sources of information. IDEM may have additional information.

On threatened or endangered species I recommend that you contact the U.S. Fish and Wildlife Service.

IDEM may be the best source of information on OSRW and ONRW, but I am also copying Linda Holst of our Water Quality Branch to see if we have any information on this.

Information on recreational uses and access is usually developed locally, and IDEM has good guidance on how this should be done.

If I get more information I will forward this to you.

Thank you
Peter Swenson
USEPA, Region 5

----- Forwarded by Peter Swenson/R5/USEPA/US on 04/09/2004 01:45 PM

Mike Joyce
04/09/2004 01:40 PM

To: Peter Swenson/R5/USEPA/US@EPA
cc:
Subject: Fw: City of La Porte, IN sensitive areas query

Hi Peter. This is Mike Joyce in Public Affairs forwarding you this request for info.

From: Spaulding.William@epamail.epa.gov <Spaulding.William@epamail.epa.gov>
Subject: Re: Fw: City of La Porte, IN sensitive areas query
Date: Fri, 09 Apr 2004 15:12:21 -0500
To: <Swenson.Peter@epamail.epa.gov>
CC: James McMahon <jmcmahon@cityoflaporte.com>
<Holst.Linda@epamail.epa.gov>
BCC:

Peter,

We don't have any information on file regarding delineated source water areas. Completing source water assessments is the responsibility of the Indiana Department of Environmental Management. For information on source water assessment areas intersecting Travis Ditch, I recommend that he contact Mr. Jim Sullivan of IDEM at (317) 308-3322. The City of LaPorte water department may also have local assessment information on hand for their system.

Bill Spaulding

Peter Swenson
04/09/04 02:36 PM
To: James McMahon <jmcmahon@cityoflaporte.com>, Linda Holst/R5/USEPA/US@EPA, William Spaulding/R5/USEPA/US@EPA
cc:
Subject: Fw: City of La Porte, IN sensitive areas query

Mr. McMahon, (also Bill Spaulding, and Linda Holst)

Thank you for your inquiry on sensitive areas.

I don't believe generally, that USEPA will have much information relating to sensitive areas in Travis Ditch, but have a few suggestions:

It's possible that USEPA may have information on drinking water sources and I am copying Bill Spaulding of our Drinking Water Branch to see if that is the case, or if he can suggest other sources of information. IDEM may have additional information.

On threatened or endangered species I recommend that you contact the U.S. Fish and Wildlife Service.

IDEM may be the best source of information on OSRW and ONRW, but I am also copying Linda Holst of our Water Quality Branch to see if we have any information on this.

From: Mac Carlisle <mcarlisle@dnr.state.in.us>
Subject: RE: City of La Porte sensitive area determination
Date: Mon, 12 Apr 2004 11:16:33 -0500
To: James McMahon <jmcmahon@cityoflaporte.com>
CC:
BCC:

I do not believe a "sensitive" area exists along the portion of Travis Ditch that passes through Area 6 and 8 of the Kingsbury Fish & Wildlife Area however:

Franklin's Ground Squirrels (state endangered) have been documented within a three mile distance from the ditch.

Indiana bat (federal endangered) habitat exists in the entire state.

Massasauga Rattlesnake (state endangered) is listed for LaPorte County.

A Great Blue Heron rookery exists along the ditch in area 8 but this is not an endangered or threatened bird.

Hope this information helps.

Mac Carlisle
Property Manager - Kingsbury F&W Area

-----Original Message-----
From: James McMahon [mailto:jmcmahon@cityoflaporte.com]
Sent: Friday, April 09, 2004 12:17 PM
To: kingsburyfwa@dnr.state.in.us
Subject: City of La Porte sensitive area determination

Hello,

My name is James McMahon and I work for the City of La Porte Wastewater Treatment Plant. We are a CSO (combined sewer overflow) community and are in the process of refining our LTCP (long term control plan) which is aimed at eliminating all but the most extreme wet-weather CSO events. Our discharge flows into Travis Ditch, then proceeds south to the Kankakee River. In our consultations with IDEM

LaPorte County
Health Department

(219) 326-6808
(219) 879-9383
(219) 325-8628

Government Complex
809 State Street – Suite 401 A
LaPorte, Indiana 46350-3385

Charles Janovsky, M.D., Health Officer
Paul E. Trost, Administrator

Jim McMahon
Wastewater Treatment Operator
2101 Boyd Blvd
LaPorte, IN 46350

Re: CSO sensitive areas

April 15, 2004

Dear Mr. McMahon,

The LaPorte County Health Department received a request from your department for us to research any "sensitive areas" along Travis Ditch. The Health Department does not sample any bathing beaches in this area, as it is mostly agricultural farmland. We do not know of any other sensitive areas along this ditch.

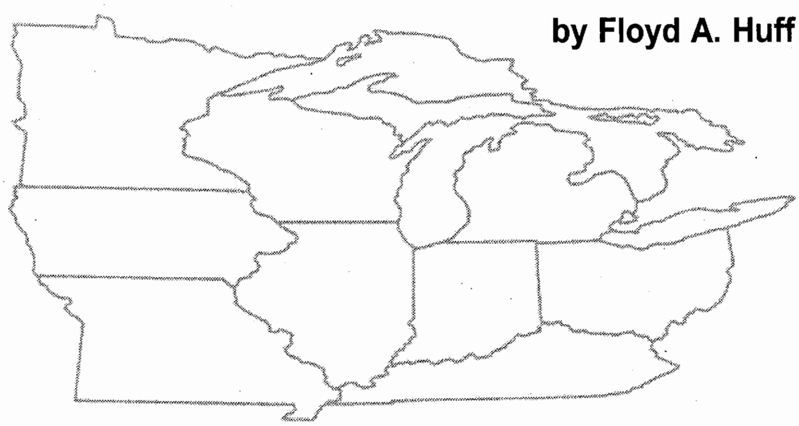
Sincerely,

Ann Klute
Environmental Planner

Bulletin 71
(MCC Research Report 92-03)

RAINFALL FREQUENCY ATLAS OF THE MIDWEST

by Floyd A. Huff and James R. Angel



Midwestern Climate Center
Climate Analysis Center
National Weather Service
National Oceanic and Atmospheric Administration

and

Illinois State Water Survey
A Division of the Illinois Department of Energy and Natural Resources

1992

Table 2. Sectional Mean Frequency Distributions for Storm Periods of 5 Minutes to 10 Days and Recurrence Intervals of 2 Months to 100 Years in Indiana

Sectional code (see figure 1 on page 4)

01- Northwes — *06 - East Central*
02 - North Central — *07 - Southwest*
03 - Northeast — *08 - South Central*
04 - West Central — *09- Southeast*
05 - Central

Rainfall (inches) for given recurrence interval

Section	*Duration*	*2-month*	*3-month*	*4-month*	*6-month*	*9-month*	*1-year*	*2-year*	*5-year*	*10-year*	*25-year*	*50-year*	*100-year*
01	10-day	2.07	2.50	2.88	3.38	3.89	4.23	4.84	5.79	6.67	8.03	9.23	10.58
01	5-day	1.68	2.01	2.27	2.63	3.03	3.29	3.84	4.70	5.50	6.81	7.99	9.37
01	72-hr	1.53	1.80	2.04	2.36	2.71	2.95	3.46	4.24	4.97	6.10	7.17	8.38
01	48-hr	1.40	1.64	1.83	2.12	2.44	2.65	3.12	3.87	4.56	5.58	6.52	7.58
01	24-hr	1.33	1.55	1.69	1.96	2.23	2.42	2.89	3.61	4.22	5.22	6.10	7.12
01	18-hr	1.25	1.45	1.59	1.84	2.09	2.27	2.72	3.39	3.97	4.91	5.73	6.69
01	12-hr	1.16	1.35	1.48	1.71	1.94	2.11	2.51	3.14	3.67	4.54	5.31	6.19
01	6-hr	1.00	1.16	1.27	1.47	1.67	1.82	2.17	2.71	3.16	3.91	4.57	5.34
01	3-hr	0.85	0.99	1.08	1.26	1.43	1.55	1.85	2.31	2.70	3.34	3.90	4.56
01	2-hr	0.77	0.90	0.98	1.13	1.29	1.40	1.68	2.09	2.45	3.03	3.54	4.13
01	1-hr	0.63	0.73	0.80	0.92	1.05	1.14	1.36	1.70	1.98	2.45	2.87	3.35
01	30-min	0.50	0.58	0.63	0.73	0.83	0.90	1.07	1.34	1.56	1.93	2.26	2.63
01	15-min	0.36	0.42	0.45	0.53	0.60	0.65	0.78	0.97	1.14	1.41	1.65	1.92
01	10-min	0.28	0.33	0.36	0.41	0.47	0.51	0.61	0.76	0.89	1.10	1.28	1.50
01	5-min	0.16	0.19	0.20	0.23	0.27	0.29	0.35	0.43	0.51	0.63	0.73	0.85
02	10-day	2.04	2.45	2.83	3.33	3.83	4.16	4.75	5.64	6.45	7.69	8.80	10.03
02	5-day	1.68	2.01	2.28	2.64	3.04	3.30	3.80	4.62	5.38	6.57	7.63	8.85
02	72-hr	1.48	1.74	1.97	2.28	2.62	2.85	3.33	4.10	4.79	5.88	6.86	8.00
02	48-hr	1.37	1.60	1.78	2.06	2.37	2.58	3.02	3.73	4.36	5.36	6.25	7.28
02	24-hr	1.30	1.51	1.65	1.91	2.17	2.36	2.78	3.43	4.00	4.90	5.67	6.54
02	18-hr	1.22	1.42	1.55	1.80	2.04	2.22	2.61	3.22	3.76	4.61	5.33	6.15
02	12-hr	1.13	1.31	1.43	1.66	1.89	2.05	2.42	2.98	3.48	4.26	4.93	5.69
02	6-hr	0.97	1.13	1.24	1.43	1.63	1.77	2.09	2.57	3.00	3.68	4.25	4.90
02	3-hr	0.83	0.97	1.06	1.22	1.39	1.51	1.78	2.20	2.56	3.14	3.63	4.19
02	2-hr	0.75	0.88	0.96	1.11	1.26	1.37	1.61	1.99	2.32	2.84	3.29	3.79
02	1-hr	0.61	0.71	0.78	0.90	1.02	1.11	1.31	1.61	1.88	2.30	2.66	3.07
02	30-min	0.48	0.56	0.61	0.70	0.80	0.87	1.03	1.27	1.48	1.81	2.10	2.42
02	15-min	0.35	0.41	0.45	0.52	0.59	0.64	0.75	0.93	1.08	1.32	1.53	1.77
02	10-min	0.28	0.32	0.35	0.41	0.46	0.50	0.58	0.72	0.84	1.03	1.19	1.37
02	5-min	0.15	0.18	0.20	0.23	0.26	0.28	0.33	0.41	0.48	0.59	0.68	0.78
03	10-day	1.81	2.18	2.52	2.96	3.40	3.70	4.25	5.12	5.84	6.96	8.01	9.16
03	5-day	1.52	1.82	2.06	2.38	2.74	2.98	3.46	4.18	4.81	5.83	6.76	7.80
03	72-hr	1.35	1.59	1.79	2.08	2.39	2.60	3.01	3.68	4.27	5.21	6.06	7.01
03	48-hr	1.27	1.48	1.65	1.91	2.20	2.39	2.77	3.38	3.92	4.78	5.57	6.45
03	24-hr	1.19	1.38	1.51	1.75	1.99	2.16	2.52	3.04	3.52	4.29	5.02	5.77
03	18-hr	1.12	1.30	1.42	1.64	1.87	2.03	2.37	2.86	3.31	4.03	4.72	5.42
03	12-hr	1.03	1.20	1.32	1.52	1.73	1.68	2.19	2.64	3.06	3.73	4.37	5.02
03	6-hr	0.89	1.04	1.13	1.31	1.49	1.62	1.89	2.28	2.64	3.22	3.76	4.33
03	3-hr	0.76	0.88	0.97	1.12	1.27	1.38	1.61	1.95	2.25	2.75	3.21	3.69
03	2-hr	0.69	0.80	0.88	1.01	1.15	1.25	1.46	1.76	2.04	2.49	2.91	3.35
03	1-hr	0.56	0.65	0.71	0.83	0.94	1.02	1.18	1.43	1.65	2.02	2.36	2.71
03	30-min	0.44	0.51	0.56	0.65	0.74	0.80	0.93	1.12	1.30	1.59	1.86	2.13
03	15-min	0.32	0.37	0.41	0.47	0.53	0.58	0.68	0.82	0.95	1.16	1.36	1.56
03	10-min	0.25	0.29	0.31	0.36	0.41	0.45	0.53	0.64	0.74	0.90	1.05	1.21
03	5-min	0.14	0.17	0.18	0.21	0.24	0.26	0.30	0.36	0.42	0.51	0.60	0.69

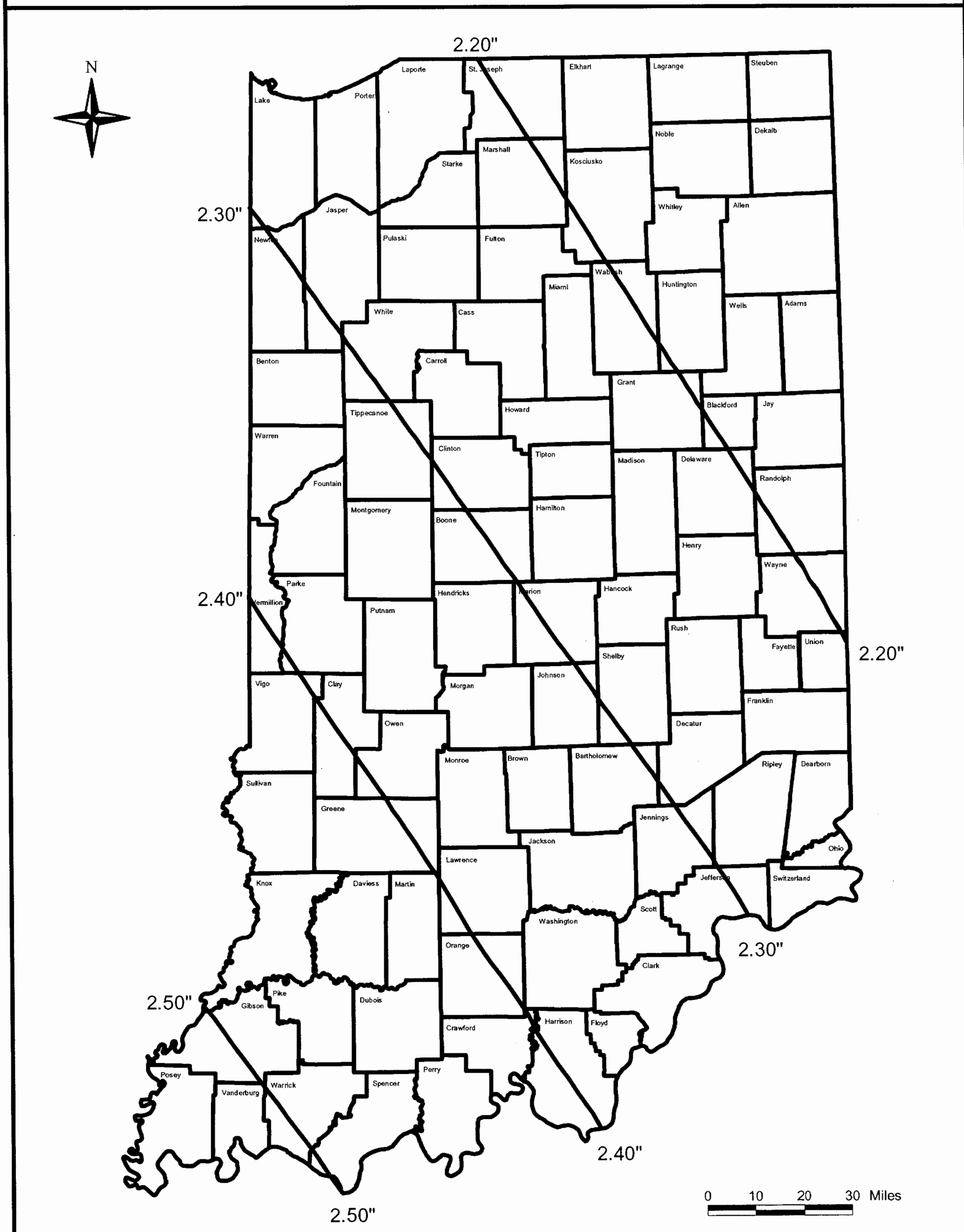
RAINFALL - 1 YEAR FREQUENCY - 12 HOUR DURATION

REFERENCE
TECHNICAL PAPER NO. 40
NATIONAL WEATHER SERVICE

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER

INDIANA DEPARTMENT OF NATURAL RESOURCES

RAINFALL - 5 YEAR FREQUENCY - 3 HOUR DURATION

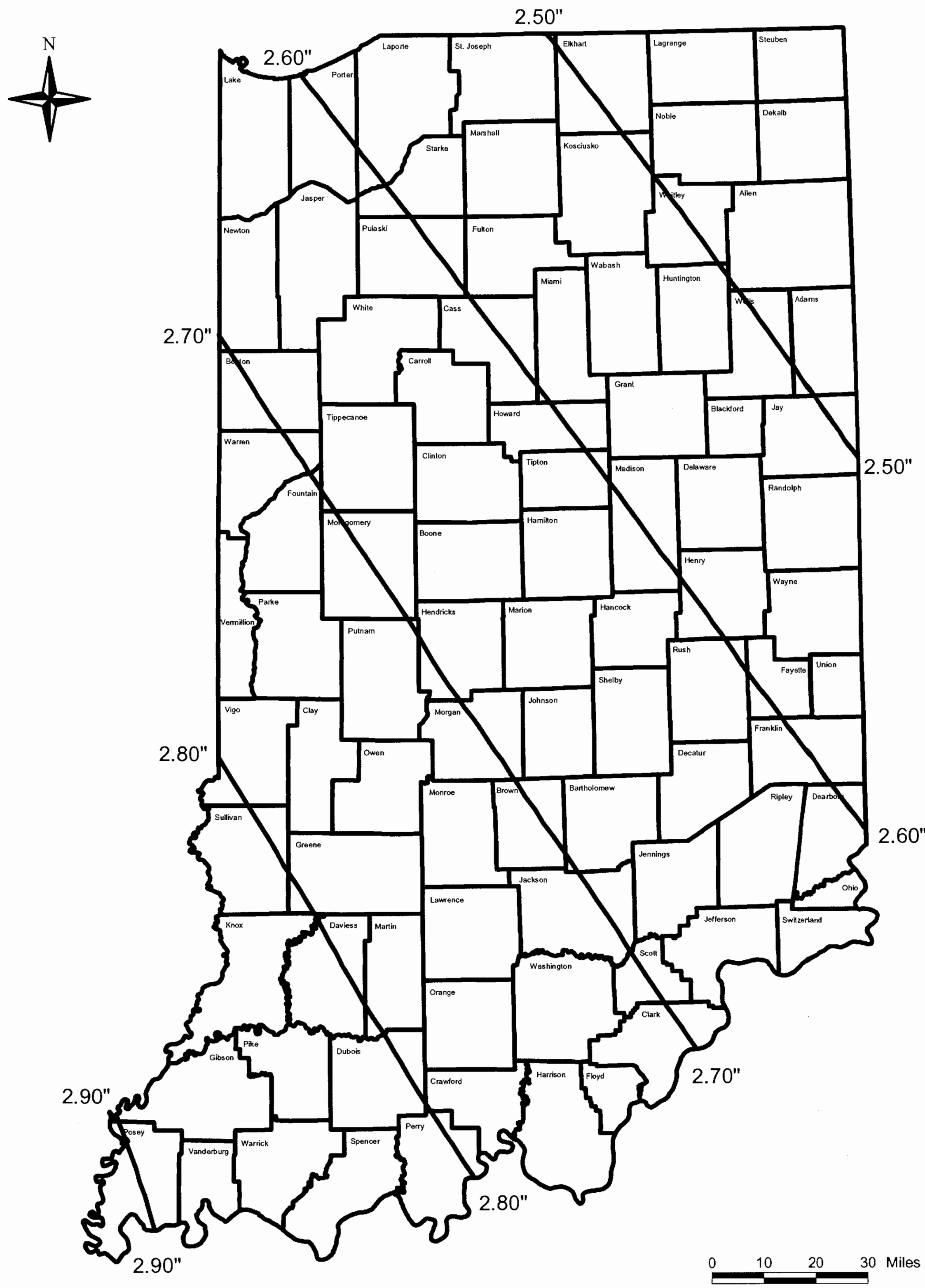


REFERENCE
TECHNICAL PAPER NO. 40
NATIONAL WEATHER SERVICE

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER

INDIANA DEPARTMENT OF NATURAL RESOURCES

RAINFALL - 10 YEAR FREQUENCY - 3 HOUR DURATION

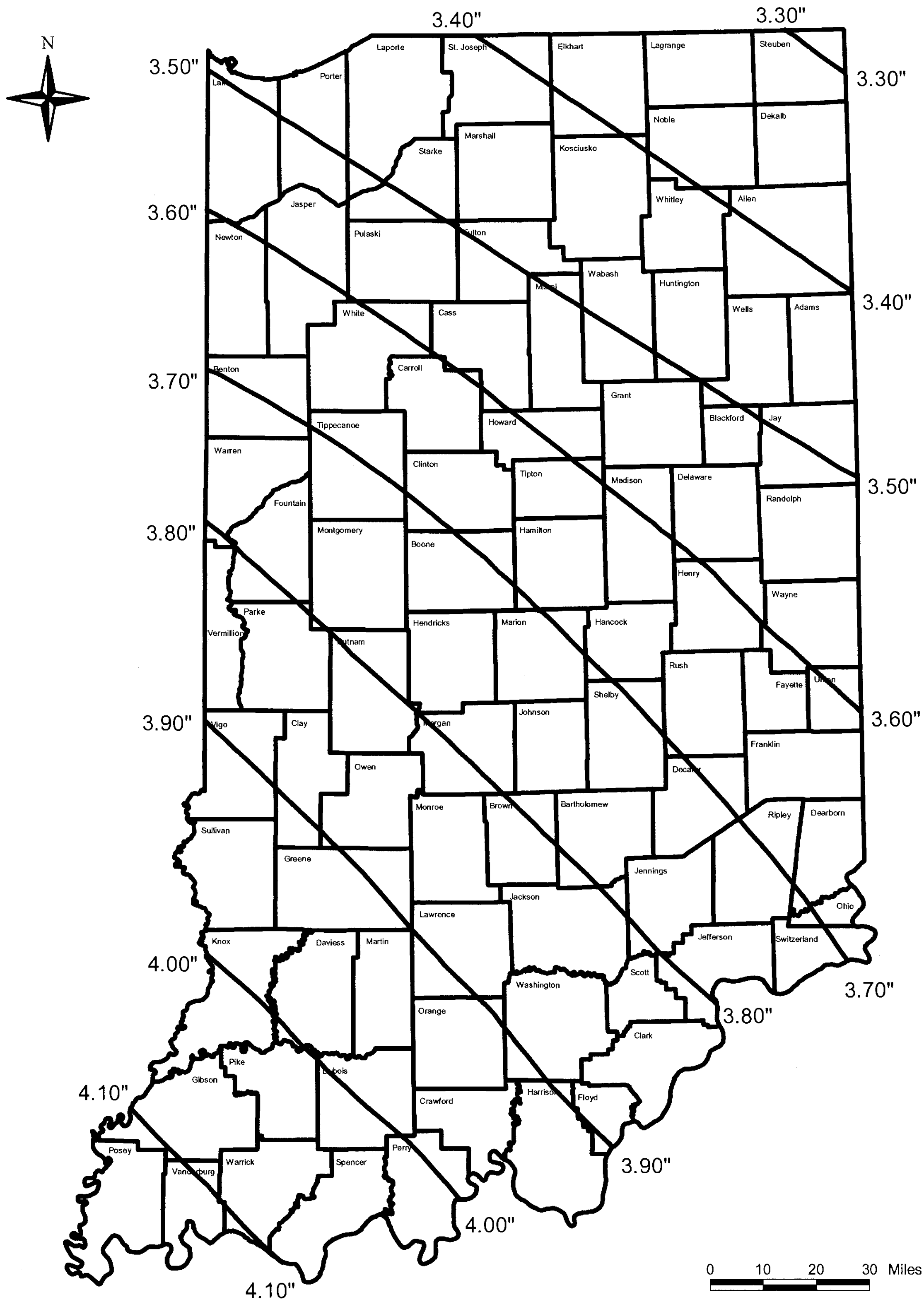


REFERENCE
TECHNICAL PAPER NO. 40
NATIONAL WEATHER SERVICE

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER

INDIANA DEPARTMENT OF NATURAL RESOURCES

RAINFALL - 10 YEAR FREQUENCY - 12 HOUR DURATION



REFERENCE
TECHNICAL PAPER NO. 40
NATIONAL WEATHER SERVICE

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER

INDIANA DEPARTMENT OF NATURAL RESOURCES

LAPORTE (INDIANA) MUNICIPAL SEWAGE WORKS

SCHEDULE OF ESTIMATED REVENUE VERSUS REVENUE REQUIREMENTS

	Current Operations	Sewer Separation Project ($71.0M)	CSO Disinfection Project ($2.7M)	Capture & Treat Project ($1.9M)	Clean CSO Lagoon ($2.0M)
Estimated Revenue Requirements:					
Proforma operating expense	$2,193,432	$2,193,432	$2,193,432	$2,193,432	$2,193,432
Normal capital improvements (1)	349,000	349,000	349,000	349,000	349,000
Average annual debt service - outstanding Bonds	563,500	563,500	563,500	563,500	563,500
Proposed 2006 Bonds - Capital Improvement Plan	305,405	305,405	305,405	305,405	305,405
Proposed Bonds - Long Term Control Plan (3)		5,941,232	225,934	158,991	167,359
Funding of Debt Service Reserve	61,081	1,249,327	106,268	92,879	94,553
Fund balance build-up (4)	70,043	70,043	70,043	70,043	70,043
Total estimated revenue requirements	$3,542,461	$10,671,940	$3,813,582	$3,733,250	$3,743,291
Estimated Annual Revenue					
Residential revenue	$1,564,971	$1,564,971	$1,564,971	$1,564,971	$1,564,971
Commercial revenue	680,149	680,149	680,149	680,149	680,149
Septic hauler revenue	44,309	44,309	44,309	44,309	44,309
Industrial revenue	356,497	356,497	356,497	356,497	356,497
Surcharge revenue	81,750	81,750	81,750	81,750	81,750
Governmental revenues	92,777	92,777	92,777	92,777	92,777
Institutional revenues	248,526	248,526	248,526	248,526	248,526
Miscellaneous revenues	11,473	11,473	11,473	11,473	11,473
Industrial fines & fees	2,089	2,089	2,089	2,089	2,089
Penalties	48,688	48,688	48,688	48,688	48,688
Interest income	8,624	8,624	8,624	8,624	8,624
Total estimated annual revenue	$3,139,853	$3,139,853	$3,139,853	$3,139,853	$3,139,853
Estimated additional revenue required	$402,608	$7,532,087	$673,729	$593,397	$603,438
Percentage increase required	13.5%	251.8%	22.5%	19.8%	20.2%

	Current Bill	Estimated Bill	Estimated Bill	Estimated Bill	Estimated Bill	Estimated Bill
Monthly billing - 5/8" meter - 5,000 gallons	$20.08	$22.78	$70.64	$24.60	$24.06	$24.13
Current Operations Increase		$2.70	$2.70	$2.70	$2.70	$2.70
LTCP Increase		$0.00	$47.85	$1.82	$1.28	$1.35

(1) Per Budget Form 1 per the sewer superintendent.

(2) Assumes a $3,170,000 Bond issue over 15 years at 5.0%

(3) Assumes 20 year bond issues at 5.5%

(4) Assumes a $210,130 buildup over 3 years.

IDEM
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

June 27, 2001

VIA CERTIFIED MAIL 7000 0600 0026 8341 1329
The Honorable Kathleen Chroback, Mayor
City of LaPorte
801 Michigan Avenue
LaPorte, Indiana 46350

Dear Mayor Chroback:

Re: Adoption of Agreed Order and
Issuance of Final Order
Commissioner, Indiana Department of
Environmental Management
v.
City of LaPorte
Case No. 2000-9996-W

This letter is to inform you that the Commissioner of the Indiana Department of Environmental Management (the Department) has approved the Agreed Order negotiated between you and members of my staff and has issued same as the Department's Final Order. A copy of the executed Final Agreed Order is enclosed.

As to civil penalties provided for in the document, please forward the check made payable to the Environmental Management Special Fund marked: Cashier, Indiana Department of Environmental Management, P.O. Box 7060, Indianapolis, Indiana 46207-7060, within thirty days of receipt of this correspondence. To insure proper processing, please reference the case number of this action with your payment.

You are no doubt familiar with the other terms of the Agreed Order to assure future compliance. Thank you for your cooperation. If there are any questions, please contact Mr. Paul Cluxton of my staff at 317/232-8432.

Sincerely,

Susan J. Baker
for Mark W. Stanifer, Chief
Water Enforcement Section
Office of Enforcement

Enclosure
cc: Mr. Donald Baugher, City Attorney
Mr. Jerry Jackson, Superintendent
LaPorte County Health Department
U.S. EPA, Region V, Water Division, Enforcement Unit II

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STATE OF INDIANA)		BEFORE THE INDIANA DEPARTMENT
)	SS:	OF ENVIRONMENTAL MANAGEMENT
COUNTY OF MARION)		

COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, Complainant,)	
v.)	Case No. 2000-9996-W
CITY OF LAPORTE, Respondent.)	

AGREED ORDER

The Complainant and the Respondent desire to settle and compromise this action without hearing or adjudication of any issue of fact or law, and consent to the entry of the following Findings of Fact and Order.

I. FINDINGS OF FACT

1. Complainant is the Commissioner ("Complainant") of the Indiana Department of Environmental Management, a department of the State of Indiana created by IC 13-13-1-1.

2. Respondent is the City of LaPorte ("Respondent"), having its main business office located at 801 Michigan Avenue, LaPorte, Indiana. Respondent operates the publicly owned 7.0 MGD trickling filter wastewater treatment plant located at 2101 Boyd Boulevard, LaPorte, Indiana, in LaPorte County, Indiana ("Site") and discharges treated wastewater to Travis Ditch, as authorized by NPDES permit IN0025577 effective May 1, 1995.

3. The Indiana Department of Environmental Management ("IDEM") has jurisdiction over the parties and the subject matter of this action.

4. Pursuant to IC 13-30-3-3, IDEM issued a Notice of Violation on January 11, 2001, via Certified Mail to:

   The Honorable Kathleen Chroback, Mayor
   City of LaPorte
   801 Michigan Ave.
   LaPorte, Indiana 46350

5. Pursuant to 327 IAC 5-2-8, Respondent's NPDES permit requires the following:

   a. Comply with all terms and conditions of the permit.
   b. Take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit.
   c. Allow the commissioner, or an authorized representative, to enter the premises and have access to records, inspect the premises or collect samples, at reasonable times and upon presentation of appropriate credentials.
   d. At all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for collection and treatment which are necessary for achieving compliance with the terms and conditions of the permit.
   e. Comply with the monitoring, recording, and reporting requirements established in 327 IAC 5-2-13, 327 IAC 5-2-14, and 327 IAC 5-2-15.

   Failure to comply with any of these requirements, pursuant to 327 IAC 5-2-8, constitutes a violation of the Clean Water Act (CWA) and the Environmental Management Act (EMA) and the NPDES permit.

6. Part I.A.1 and Part 1.A.2 of Respondent's NDPES Permit sets forth effluent limitations applicable to the discharge from Outfall 001.

7. Indiana Code IC 13-18-4-5 provides, in part, that it is unlawful for any person to throw, run, drain, or otherwise dispose into any of the streams or waters of the state, or to cause, permit or suffer to be thrown, run, drained, allowed to seep, or otherwise disposed into any waters any organic or inorganic matter that causes or contributes to a polluted condition of any waters, as determined by a rule of the board adopted under sections 1 and 3 of this chapter.

8. Respondent failed to comply with its NPDES Permit Monthly Average Concentration effluent limitation for Copper in May through November 1999, February through September 2000, and November 2000. Additionally, the

April 2001. Additionally, the Respondent failed to comply with its NPDES Permit Daily Maximum effluent limitation for Cyanide on 1 occasion during September 2000. The failure to comply with NPDES Permit effluent limitations is in violation of IC 13-18-4-5, 327 IAC 5-2-8(1), and Part I.A.1. & Part I.A.2. of the NPDES Permit.

9. In recognition of the settlement reached, Respondent waives any right to administrative and judicial review of this Agreed Order.

II. **ORDER**

1. This Agreed Order shall be effective ("Effective Date") when it is approved by the Complainant or her delegate, and has been received by the Respondent. This Agreed Order shall have no force or effect until the Effective Date.

2. Within sixty (60) days of the Effective Date of this Agreed Order, Respondent shall develop and submit to IDEM for approval a "Copper Compliance Plan" which identifies the actions that Respondent will take to achieve compliance with its NPDES Permit effluent limitations for Copper. The Copper Compliance Plan shall include an implementation and completion schedule, including specific milestone dates.

3. The Respondent shall, within eighteen (18) months of completion of the Copper Compliance Plan (Performance Period), demonstrate twelve (12) consecutive months of compliance (Compliance Demonstration) with the effluent limitations for Copper contained in its NPDES Permit. In the event that Respondent fails to make the Compliance Demonstration, Respondent shall, within sixty (60) days of becoming aware that the Compliance Demonstration cannot be achieved, develop and submit to IDEM, for approval, a plan which identifies the actions that Respondent will take to achieve compliance with the effluent limitations for Copper contained in its NPDES Permit. The plan, if required, shall include an implementation and completion schedule, including specific milestone dates.

4. The compliance plan (CP) required by Paragraphs 2 and 3 are subject to IDEM approval. If a CP is deemed inadequate by IDEM, a revised plan shall be submitted within fifteen (15) days of receipt of notice from IDEM of the inadequacies thereof. If, after submission of the revised document, IDEM still finds the document to be inadequate, then IDEM will request further modification of the CP as necessary to meet IDEM's requirements. If the subsequently submitted modification of the CP does not meet IDEM's approval, IDEM will suggest specific modifications to be made to the CP and require re-submittal by a specific date. If the IDEM-suggested modifications are not incorporated into the

CP by the Respondent (or an alternative plan is not submitted by the Respondent) by the specified date or are not approved by IDEM, the Respondent will be subject to stipulated penalties as described below. The Respondent, upon receipt of written notification from IDEM, shall immediately implement the approved plan and adhere to the milestone dates therein. The approved plan shall be incorporated into the Agreed Order and shall be deemed an enforceable part thereof.

5. The Respondent shall conduct a study and develop and submit to IDEM by July 31, 2001, a Stream Reach Characterization and Evaluation Report (SRCER) which characterizes potential water quality impacts on Travis Ditch from the discharges from Outfall 002. In addition to any information specified by Part III of Attachment A of Respondent's NPDES Permit, the report shall include the following information:

   a. The protocol that was used to conduct the study. This protocol shall include, but not be necessarily limited to, the monitoring of any discharges from Outfall 002.

      Each grab sample shall be tested for each parameter listed in Part I.A.1 and Part I.A.2 of the Respondent's NPDES Permit.

   b. A listing of precipitation events that occurred during the study period, including the amount and duration of each precipitation event.

   c. A listing of all discharge events during the study period from Outfall 002, including the date, time, volume and duration of each discharge event.

   d. An identification and summary of the water quality characteristics of the discharges from Outfall 002, including an indication of the treatment capabilities provided by the CSO capture/control lagoon and associated pumping facilities.

   e. An identification and summary of the impacts of the discharges from Outfall 002 on the water quality characteristics of the receiving waters, during the study period.

   f. A characterization of the system and an evaluation of the effectiveness of the implemented CSO controls with respect to the attainment of Water Quality Standards.

   In the event that IDEM deems Respondent's SRCER to be deficient, Respondent shall, upon receiving written notice from IDEM of such deficiency, supplement its

SRCER as necessary to correct the noted deficiencies within the timeframe requested.

6. The Respondent shall develop and submit to IDEM for approval, within twelve (12) months of its submittal of a sufficient SRCER, but no later than July 31, 2002, a Long Term CSO Control Plan (LTCP) that will enable the Respondent to achieve compliance with the technology-based and water quality-based requirements of the CWA. In addition to any information specified by Part VI of Attachment A of Respondent's Permit, the LTCP shall consist of, but not necessarily be limited to the following elements:

a. Characterization, Monitoring and Modeling - The characterization, monitoring, and if necessary the modeling of the Combined Sewer System (CSS) to provide for effective and efficient operation of the CSS, and to aid in the selection of the Long Term CSO Controls.

b. Public Participation - The identification of a process by which the Public can participate in the decision-making which will ultimately select the Long Term CSO Controls.

c. Sensitive Areas - The consideration and assurance that Sensitive Areas be given the highest priority when evaluating the selection of the Long Term CSO Controls.

d. Evaluation of Alternatives - The Evaluation of Control Alternatives that will enable the Respondent to, in consultation with the permitting authority, and the public, select the Long Term CSO Controls that will achieve compliance with the technology-based and water quality-based requirements of the CWA.

e. Cost/Performance Considerations - The evaluation of the Cost/Performance considerations that establishes the relationship between a comprehensive set of Long Term CSO Control alternatives and their respective cost and anticipated performance.

f. Operational Plan - A schedule for revising the Combined Sewer Operational Plan (CSOOP) to include the selected Long Term CSO Controls. The revised CSOOP should be fully implemented as soon as possible, but no later than one year, after the construction, installation, and/or completion of the selected Long Term CSO Controls.

g. Maximizing Treatment at the WWTP - The Respondent shall evaluate and select control alternatives which provide for the maximization of treatment at the WWTP.

h. Implementation Schedule - The LTCP shall include an implementation schedule which includes specific milestone dates for the design, construction, and implementation of the selected Long Term CSO Controls. The implementation schedule shall take into consideration eliminating overflows that discharge to sensitive areas as the highest priority and use impairment. The implementation schedule should also consider the Respondent's financial capabilities by evaluating:

i. The median household income;

ii. Total annual wastewater and CSO control costs per household as a percent of the median household income;

iii. Overall net debt as a percent of full market property value;

iv. The property tax revenues as a percent of full market property value;

v. The property tax collection rate;
vi. The unemployment rate;

vii. The Respondent's bond rating.

Additionally, the implementation schedule should consider:

i. Sources of funding, such as the availability of grants and loans;

ii. Previous and current residential, commercial, and industrial sewer user fees and rate structures.

i. Post-Construction Compliance Monitoring - The Long Term Control Plan shall provide for a process by which the Respondent will evaluate the effectiveness of the selected Long Term CSO Controls, and their adequacy in achieving compliance with the technology-based and water quality-based requirements of the CWA.

The Long Term Control Plan(LTCP) shall be subject to the approval of IDEM. If the LTCP is deemed inadequate by IDEM, a revised plan shall be submitted within fifteen (15) days of receipt of notice from IDEM of the inadequacies thereof. If, after submission of the revised document, IDEM still finds the document to be inadequate, then IDEM will request further modification of the LTCP as necessary to meet IDEM's requirements. If the subsequently submitted modification of the LTCP does not meet IDEM's approval, IDEM will suggest specific modifications to be made to the LTCP and require re-submittal by a specific date. If modifications are not incorporated into the LTCP by the Respondent (or an alternative plan is not submitted by the Respondent) by the specified date or are not approved by IDEM, the Respondent will be subject to stipulated penalties as described below. The Respondent, upon receipt of written notification from IDEM, shall immediately implement the approved plan and adhere to the milestone dates therein. The approved plan shall be incorporated into the Agreed Order and shall be deemed an enforceable part thereof.

7. Submittals required by this Agreed Order paragraphs 2-4, shall be sent to:

Paul Cluxton, Case Manager, IDEM Office of Enforcement
100 N. Senate Avenue
P. O. Box 6015
Indianapolis, IN 46206-6015

Submittals required by paragraphs 5-6 shall be sent to Dave Tennis, Urban Wet Weather Section, Office of Water Quality.

8. Respondent is assessed a Civil Penalty of Two Thousand Dollars ($2,000). Said penalty amount shall be due and payable to the Environmental Management Special Fund within thirty (30) days of the Effective Date of this Agreed Order.

9. In the event the terms and conditions of the following paragraphs are violated, the Complainant may assess and the Respondent shall pay a stipulated penalty in the following amount:

VIOLATION		PENALTY
Paragraph 2	Failure to submit Copper Compliance Plan	$ 500 per week late
Paragraph 3	Failure to comply with NPDES Permit effluent limitations for Copper during the Performance Period	$1,000 per violation
Paragraph 3	Failure to submit plan, if required	$ 500 per week late
Paragraph 3	Failure to comply with any milestone date identified in the approved plan	$1,000 per week late
Paragraph 4	Failure to submit revised plan, if required	$ 500 per week late
Paragraph 4	Failure to comply with any milestone date identified in the approved plan	$1,000 per week late

Paragraph 5	Failure to timely submit SRCER or timely respond to deficiencies	$500 per week late
Paragraph 6	Failure to timely submit complete Long Term Control Plan or timely respond to notice of deficiencies	$500 per week late

10. Stipulated penalties shall be due and payable within thirty (30) days after Respondent receives written notice that the Complainant has determined a stipulated penalty is due. Assessment and payment of stipulated penalties shall not preclude the Complainant from seeking any additional relief against the Respondent for violation of the Agreed Order. In lieu of assessment of the stipulated penalty given above, the Complainant may seek any other remedies or sanctions available by virtue of Respondent's violation of this Agreed Order, or Indiana law, including but not limited to civil penalties pursuant to IC 13-30-4.

11. Civil and stipulated penalties are payable by check to the Environmental Management Special Fund. Checks shall include the Case Number of this action and shall be mailed to:

Cashier
IDEM
100 N. Senate Avenue
P.O. Box 7060
Indianapolis, Indiana 46207-7060

12. In the event that the civil penalty required by Order paragraph 8 is not paid within thirty (30) days of the Effective Date of this Agreed Order, Respondent shall pay interest on the unpaid balance at the rate established by IC 24-4.6-1-101. The interest shall continue to accrue until the civil penalty is paid in full.

13. This Agreed Order shall apply to and be binding upon the Respondent, its successors and assigns. The Respondent's signatories to this Agreed Order certify that they are fully authorized to execute this document and legally bind the parties they represent. No change in ownership, corporate, or partnership status of the Respondent shall in any way alter its status or responsibilities under this Agreed Order.

14. The provisions of this Agreed Order do not affect the limitations and requirements set forth in Respondent's NPDES Permit. Efforts by Respondent to comply with provisions of this Agreed Order shall not serve as a justification for not complying with limitations and requirements set forth in its NPDES Permit.

15. In the event that any terms of the Agreed Order are found to be invalid, the remaining terms shall remain in full force and effect and shall be construed and enforced as if the Agreed Order did not contain the invalid terms.

16. This Agreed Order shall remain in effect until Respondent has complied with the terms of this Agreed Order.

17. "Force Majeure", for purposes of this Agreed Order, is defined as any event arising from causes totally beyond the control and without fault of the Respondent that delays or prevents the performance of any obligation under this Agreed Order despite Respondent's best efforts to fulfill the obligation. The requirement that the Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. "Force Majeure" does not include changed business or economic financial inability to complete the work required by this Agreed Order or increases in costs to perform the work.

The Respondent shall notify IDEM by calling within three (3) calendar days and by writing no later than seven (7) calendar days after it has knowledge of any event which the Respondent contends is a force majeure. Such notification shall describe the anticipated length of the delay, the cause or causes of the delay, the measures taken or to be taken by the Respondent to minimize the delay, and the timetable by which these measures will be implemented. The Respondent shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of force majeure for that event. The Respondent shall have the burden of demonstrating that the event is a force majeure. The decision of whether an event is a force majeure shall be made by IDEM.

If a delay is attributable to a force majeure, IDEM shall extend, in writing, the time period for performance under this Agreed Order, by the amount of time that is attributable to the event constituting the force majeure.

TECHNICAL RECOMMENDATION
Department of Environmental Management

By: Mark W. Stanifer
Mark W. Stanifer, Chief
Water Enforcement Section
Office of Enforcement

Date: 5-25-2001

RESPONDENT
City of LaPorte

By: Kathleen A. Chroback

Printed: KATHLEEN A. CHROBACK

Title: Mayor

Date: 6-13-01

COUNSEL FOR COMPLAINANT
Department of Environmental Management

By: Sierra L. Cutts
Sierra L. Cutts
Office of Legal Counsel

Date: 6-21-01

COUNSEL FOR RESPONDENT

By: Don B
Donald Baugher

APPROVED AND ADOPTED BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT THIS 22 DAY OF June, 2001.

For the Commissioner:

Felicia A. Robinson
Assistant Commissioner
Office of Enforcement

IDEM

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

OE – Mail Code 60-02
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

July 8, 2005

VIA CERTIFIED MAIL 7000 0600 0027 2042 5739

The Honorable Leigh E. Morris, Mayor
City of LaPorte
801 Michigan Avenue
LaPorte, IN 46350

Dear Mayor Morris:

Re: Agreed Order, Case No. 2000-9996-W
Combined Sewer Overflow Long Term Control Plan Approval

This is to inform you that, pursuant to Paragraph 6 of Agreed Order Case No. 2000-9996-W (Agreed Order), the Indiana Department of Environmental Management (IDEM) hereby approves the City of LaPorte's Combined Sewer Overflow Long Term Control Plan (LTCP), as revised and submitted in June 2005. The LTCP identifies controls that will be promptly implemented by the City of LaPorte, with a goal of eliminating all combined sewer overflows within the next three years. The LTCP is thus expected to timely provide for compliance with the water quality based and technology based requirements of the Clean Water Act and state law, and is therefore deemed approvable by IDEM.

In accordance with Paragraph 6 of the Agreed Order, the approved LTCP is hereby incorporated into the Agreed Order and deemed an enforceable part thereof. Additionally, in accordance with Paragraph 6 of the Agreed Order, upon receipt of this correspondence, LaPorte must implement the approved LTCP, in accordance with the schedule contained therein.

Please note that IDEM appreciates the proactive approach taken by LaPorte to address its combined sewer overflow issues. If you have any questions, please contact Mr. Paul Cluxton of my staff at (317) 232-8432.

Sincerely,

Mark W. Stanifer

Mark Stanifer, Chief
Water Enforcement Section
Office of Enforcement

cc: Patrick Kuefler, USEPA, Region V
Peter Swenson, USEPA Region V
Sally Swanson, USEPA Region V
Jerry P. Jackson, City of LaPorte
Richard Erhardt, Malcolm Pirnie
Kari Evans, Barnes & Thornburg
LaPorte County Health Department