

**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF INDIANA  
SOUTH BEND DIVISION**

**UNITED STATES OF AMERICA, and )  
STATE OF INDIANA, )  
 )  
Plaintiffs, )  
 )  
v. )  
 )  
CITY OF ELKHART, INDIANA, )  
 )  
Defendant. )  
\_\_\_\_\_ )**

**Case No. 2:11-CV-328 JVB**

**CONSENT DECREE**

## TABLE OF CONTENTS

I.	JURISDICTION AND VENUE .....	2
II.	APPLICABILITY .....	3
III.	OBJECTIVES .....	4
IV.	DEFINITIONS .....	4
V.	COMPLIANCE REQUIREMENTS .....	13
VI.	CIVIL PENALTIES .....	20
VII.	REPORTING REQUIREMENTS .....	20
VIII.	STIPULATED PENALTIES .....	23
IX.	PAYMENT AND RELATED MATTERS .....	27
X.	FORCE MAJEURE .....	29
XI.	DISPUTE RESOLUTION .....	30
XII.	INFORMATION COLLECTION AND RETENTION .....	32
XIII.	EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS .....	34
XIV.	COSTS .....	36
XV.	NOTICES .....	36
XVI.	EFFECTIVE DATE .....	39
XVII.	RETENTION OF JURISDICTION .....	39
XVIII.	MODIFICATION .....	39
XIX.	SCHEDULE RECONSIDERATION BASED ON FINANCIAL CIRCUMSTANCES	39
XX.	TERMINATION .....	42
XXI.	PUBLIC PARTICIPATION .....	43

XXII. SIGNATORIES/SERVICE ..... 44

XXIII. INTEGRATION/APPENDIX ..... 44

XXIV. FINAL JUDGMENT ..... 45

XXV. APPENDIX ..... 45

**APPENDIX**

A. LONG TERM CONTROL PLAN

WHEREAS, Plaintiffs United States of America (United States) on behalf of the United States Environmental Protection Agency (EPA) and the State of Indiana (Indiana) on behalf of the Indiana Department of Environmental Management (IDEM) have filed a Complaint in this case concurrently with this Consent Decree alleging that Defendant City of Elkhart (Elkhart) violated Sections 301 and 311 of the Clean Water Act, 33 U.S.C. §§ 1311 and 1321, Title 327 of the Indiana Administrative Code, and Elkhart's Current Permits by discharges from Combined Sewer Overflows (CSO) into the waters of the United States and the waters of Indiana that have violated and continue to violate Elkhart's Current Permits. The United States and Indiana seek civil penalties and injunctive relief for these alleged violations.

WHEREAS Elkhart has developed a Long Term Control Plan (LTCP) that is attached as Appendix A to, and incorporated into, this Consent Decree.

WHEREAS IDEM acknowledges that in developing the LTCP, Elkhart has adequately followed the LTCP development process as provided in both EPA's CSO Control Policy and Indiana law, and IDEM intends to approve the LTCP concurrent with the United States' motion for entry of this Decree, subject to the provisions of Section XXI (Public Participation) of this Decree.

WHEREAS Elkhart's estimate of the cost of complying with the requirements of the LTCP constitutes a High Burden within the meaning of the Financial Capability Matrix on page 41 of EPA's Financial Capability Assessment Guidance.

The Parties agree, and the Court by entering this Consent Decree finds, that the parties negotiated this Consent Decree in good faith, that the Consent Decree will avoid complex and

protracted litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW THEREFORE, before the taking of any testimony, without the adjudication of any fact or law except as provided in Section I, below; without admission by Elkhart of any violations or wrongdoing; and with the consent of the Parties, the Court ORDERS, JUDGES, and DECREES as follows:

**I. JURISDICTION AND VENUE**

1. This Court has jurisdiction over the subject matter of this case pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and Section 309(b) of the Act, 33 U.S.C. § 1319(b), and over the Parties. Venue lies in this District pursuant to Section 309(b) of the Act, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1391(b), 1395(a) because Defendant is located in this judicial district and the violations alleged in the Complaint are alleged to have occurred in this judicial district. For purposes of this Decree, or any action to enforce this Decree, Defendant consents to the Court's jurisdiction over this Decree or such action, and over Defendant, and consents to venue in this judicial district.
2. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims on which relief may be granted pursuant to Section 309 of the Act, 33 U.S.C. § 1319, and Title 327 of the Indiana Administrative Code.

## **II. APPLICABILITY**

3. The obligations of this Consent Decree apply to and are binding on the United States and Indiana, and on Elkhart and any successor or other entities or persons otherwise bound by law.
4. Any transfer of the ownership or operation of all or any part of the Facility to any other person or entity must be conditioned on the transferee's agreement to undertake the obligations required by this Decree, as provided in a written agreement between Elkhart and the proposed transferee, enforceable by the United States and Indiana as third-party beneficiaries of such agreement. At least 30 Days prior to such transfer, Elkhart shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement to EPA Region 5, the United States Attorney for the Northern District of Indiana, and the United States Department of Justice, in accordance with Section XVI (Notices) of this Decree. Any attempt to transfer ownership or operation of the Facility without complying with this Paragraph constitutes a violation of this Decree. No transfer of ownership or operation of the Facility, whether in compliance with this Paragraph or otherwise, shall relieve Elkhart of its obligation to ensure that the terms of this Decree are implemented.
5. Elkhart shall make a copy of this Consent Decree available to all of its officers, employees, and agents whose duties reasonably might include compliance with any provision of this Decree, and shall notify those individuals of its availability.

6. In any action to enforce this Consent Decree, Elkhart shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

### **III. OBJECTIVES**

7. The objectives of this Consent Decree include:
  - a. causing Elkhart to achieve and remain in compliance with the Clean Water Act;
  - b. causing Elkhart to achieve and remain in compliance with State Law; and
  - c. causing Elkhart to achieve and remain in compliance with Elkhart's Current Permits.

### **IV. DEFINITIONS**

8. Terms used in this Consent Decree, including the attached Appendix A, that are defined in the Act or in regulations promulgated pursuant to the Act or in Elkhart's Current Permits shall have the meanings assigned to them in the Act or such regulations or Elkhart's Current Permits, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, including the attached Appendix A, the following definitions shall apply:
  - a. "AACOA Sewer Interceptor" shall mean the sewer interceptor from the company known as AACOA Incorporated;
  - b. "AEP Dam" shall mean the dam owned by American Electric Power located at Johnson Street;

- c. “Appendix A” shall mean Appendix A, Long Term Control Plan referenced in Paragraph 10 of this Decree, which is attached to, and incorporated into this Decree;
- d. “Bid Date” shall mean the date by which: (1) Elkhart has appropriately allocated funds for a specific CSO Control Measure (or portion thereof); (2) the bid for the specific CSO Measure has been accepted and awarded by Elkhart’s Board of Public Works for the construction of the CSO Control Measure; and (3) Elkhart has issued a notice to proceed to the contractor who will perform the work.  
  
Several CSO Control Measures in Table 1-3 consist of separate components. For those CSO Control Measures, Completion of Bidding Process shall be achieved when the first project in the construction sequence has met the above definition;
- e. “Bypass,” “Bypasses,” or “Bypassed” shall mean the intentional diversion of waste streams from any portion of a treatment facility;
- f. “Clean Water Act” or “Act” shall mean the Clean Water Act, which is currently codified at 33 U.S.C. §§ 1251-1387, and all regulations promulgated thereunder, in effect at the time in question;
- g. “Combined Sewer Overflow Control Policy” or “CSO Control Policy” shall mean the EPA policy found in 59 Fed. Reg. 18688-98 (Apr. 19, 1994);
- h. “Combined Sewer Overflow Discharge” or “CSO Discharge” shall mean any discharge from any outfall identified in Elkhart’s Current Permits as a “Combined Sewer Overflow” or “CSO;”



- i. “Commencement of Construction” shall mean when Elkhart issues a notice to proceed for the relevant project;
- j. “Complaint” shall mean the complaint filed by Plaintiffs in this case;
- k. “Consent Decree” or “Decree” shall mean this Consent Decree and Appendix A;
- l. “Critical Milestone” shall mean significant dates by which progress in implementing the LTCP will be tracked. For each major CSO Control Measure shown in Table 1-3 of Appendix A, the Critical Milestones tracked will be Design Date, Bid Date, and Date of Full Operation;
- m. “CSO” shall mean Combined Sewer Overflow;
- n. “CSO Control Measures” shall mean the structural measures designed to eliminate, reduce, or mitigate the volume, frequency, or pollutant levels in CSOs described in Table 1-3 of Appendix A;
- o. “CSO Operational Plan” shall mean Defendant’s plan approved by Plaintiffs, including any subsequent annual updates or revisions to the plan approved by Plaintiffs, for implementing, among other things, the Nine Minimum Controls contained in the CSO Control Policy;
- p. “Current Permits” shall mean Elkhart’s National Pollution Discharge Elimination System (NPDES) Permit No. IN0025674, excluding attachment A to that permit, and any such permits that succeed that permit in effect at a particular time in question;
- q. “Date of Full Operation” shall mean the completion of construction and installation such that a relevant system has been placed in full operation, and is

expected to both function and perform as designed, including all control systems and instrumentation necessary for normal operations and all residual handling systems. Elkhart shall verify the Date of Full Operation in a memorandum to Elkhart's Board of Public Works. Several CSO Control Measures in Table 1-3 of Appendix A consist of separate components. For those CSO Control Measures, the Date of Full Operation shall be the date that the last component is completed;

- r. "Date of Lodging" shall mean the date the Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Northern District of Indiana;
- s. "Day" shall mean a calendar day unless expressly stated to be a Working Day. To compute any period of time pursuant to this Consent Decree in which the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next Working Day;
- t. "Defendant" shall mean the City of Elkhart;
- u. "Design Criteria" shall mean and specify how the selected CSO Control Measures shall be designed to achieve the required level of control. All selected LTCP projects will be designed in accordance with standard engineering practices to ensure that corresponding facility-specific and system-wide Performance Criteria will be achieved;
- v. "Design Date" shall mean the date on which the design has officially begun. The design process may include preliminary sizing, modeling, final sizing, and preparation of final plans and specifications. Elkhart shall verify the Design Date

by a memorandum to Elkhart's Board of Public Works that design has begun.

Several CSO Control Measures in Table 1-3 of Appendix A consist of several components. For those CSO Control Measures, the Design Date shall be achieved when the first project in the construction sequence has met the above definition;

- w. "EEC" shall mean the Elkhart Environmental Center located at the east end of Lusher Avenue in central Elkhart;
- x. "Effective Date" shall mean the date of entry of this Consent Decree by the Court after satisfaction of the public notice and comment procedures of Section XXI (Public Participation) of this Consent Decree, and 28 C.F.R. § 50.7;
- y. "Elkhart" shall mean the City of Elkhart, Indiana;
- z. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States;
- aa. "EPA's Financial Capability Assessment Guidance" shall mean EPA's February 1997 publication number EPA 832-B-97-004 entitled "Combined Sewer Overflows—Guidance for Financial Capability Assessment and Schedule Development;"
- bb. "EPA's CSO Control Policy" shall mean EPA's "Combined Sewer Overflow (CSO) Control Policy," which was published in the Federal Register on April 19, 1994 (59 Fed. Reg. 18688, 18688-18988). Pursuant to Section 402(q) of the Clean Water Act, 33 U.S.C. § 1342(q), "[e]ach permit, order, or decree issued pursuant to this chapter after December 21, 2000 for a discharge from a municipal combined storm and sanitary sewer shall conform to" EPA's CSO Control Policy;

- cc. “Facility” shall mean and include:
1. any wastewater collection and conveyance system owned or operated by Elkhart that is designed to collect and convey domestic, commercial, and industrial sewage to a wastewater treatment plant or to a CSO structure;
  2. any wastewater treatment plant owned or operated by Elkhart;
  3. any CSO structure owned or operated by Elkhart; and
  4. any CSO structure to which Elkhart directs or conveys the flow of domestic, commercial, and industrial sewage or at which such sewage from Elkhart users comes to be found;
- dd. “Federal Census” shall mean census data and analysis published by the United States Census Bureau every 10 years;
- ee. “Financial Capability Assessment” shall mean an analysis of Elkhart’s financial capability in the manner described in EPA’s Financial Capability Assessment Guidance including, without limitation, an evaluation and calculation of Elkhart’s residential indicator as described in section III of EPA’s Financial Capability Assessment Guidance and an evaluation of Elkhart’s financial indicators as described in section IV of EPA’s Financial Capability Assessment Guidance;
- ff. “FOP Youth Park” shall mean the Fraternal Order of Police Youth Park;
- gg. “IDEM” shall mean the State of Indiana Department of Environmental Management;
- hh. “Indiana” shall mean the State of Indiana;

- ii. “Interest” shall mean interest calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961;
- jj. “Long Term Control Plan” or “LTCP” shall mean Appendix A, Long Term Control Plan referenced in Paragraph 10 of this Decree, which is attached to, and incorporated into this Decree;
- kk. “LS” shall mean lift station;
- ll. “L-TUFF” shall mean a model node that identifies the lift station at Oakland Avenue;
- mm. “MG” shall mean million gallons;
- nn. “MGD” shall mean millions of gallons per day;
- oo. “Monthly Monitoring Report” shall mean any discharge monitoring report or monthly report of operations that Elkhart is required to submit to IDEM on a monthly basis pursuant to Elkhart’s Current Permits;
- pp. “Nine Minimum Controls” shall mean the Nine Minimum Controls discussed in the CSO Control Policy and in EPA’s May, 1995 publication entitled “Combined Sewer Overflows; Guide for Nine Minimum Controls;”
- qq. “NPDES” shall mean the National Pollution Discharge Elimination System pursuant to which permits are issued under Section 402 of the Clean Water Act, 33 U.S.C. § 1402;
- rr. “Overflow Event” shall mean one or more untreated overflows from the combined sewer system resulting from a single precipitation event. If multiple outfall pipes

overflow during a single precipitation event, those overflows constitute one  
Overflow Event;

ss. “Paragraph” shall mean a portion of this Decree identified by an arabic numeral;

tt. “Party” or “Parties” shall mean the United States, Indiana, and Elkhart, or any of  
them;

uu. “PE” shall mean primary effluent;

vv. “Performance Criteria” shall mean and include any of the following: completing  
the CSO Control Measures so that they operate as designed; not exceeding the  
Typical Year Overflow Event frequency described in Table 1-3 of Appendix A;  
conveying the design flow rates; and meeting any and all applicable LTCP  
requirements and permit requirements;

ww. “PLC” shall mean Programmable Logic Controls;

xx. “Plaintiffs” shall mean the United States and Indiana;

yy. “Remaining LTCP Projects” shall mean the Riverside Drive group of projects and  
the Lower St. Joseph River group of projects described in Table 1-3 of  
Appendix A;

zz. “Section” shall mean a portion of this Decree identified by a roman numeral;

aaa. “State Law” shall mean the applicable provisions of Title 13 of the Indiana Code  
and Title 327 of the Indiana Administrative Code;

bbb. “Submit,” “Submits,” or “Submitted” shall mean any of the following: (1) place in  
certified mail in a properly addressed envelope with sufficient postage for first  
class delivery; (2) tender to an overnight courier in a properly addressed envelope

and prepay or otherwise arrange for payment of the delivery fees; or

(3) hand-deliver and obtain the signature of an authorized recipient;

ccc. “Subparagraph” shall mean a portion of this Consent Decree and Appendix A identified by a lower case letter;

ddd. “Ten State Standards” shall mean Recommended Standards for Water Works; Policies for the Review and Approval of Plans and Specifications for Public Water Supplies, A Report of the Water Supply Committee of the Great Lakes–Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers published by Health Research Incorporated, Health Education Services Division, Post Office Box 7126, Albany, New York 12224, with the following member states as of 2007: Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, New York, Ohio, Ontario, Pennsylvania, and Wisconsin;

eee. “Typical Year” shall mean the amount, intensity, and frequency of rainfall that occurred during 1992;

fff. “United States” shall mean the United States of America acting on behalf of EPA;

ggg. “Unlisted Discharge” shall mean any discharge of combined sewage to waters of Indiana or waters of the United States from the Facility from or through any point source that is not a CSO Discharge;

hhh. “Working Day” shall mean a day other than a Saturday, Sunday, or federal holiday; and

iii. “WWTP” shall mean Elkhart’s Wastewater Treatment Plant.

**V. COMPLIANCE REQUIREMENTS**

**A. NINE MINIMUM CONTROLS**

9. Elkhart shall comply with the provisions in the Current Permits pertaining to the Nine Minimum Controls set forth in the CSO Control Policy through the continued implementation of Elkhart's approved CSO Operational Plan and any subsequently approved revisions to the CSO Operational Plan.

**B. LONG TERM CONTROL PLAN**

10. Elkhart shall comply with the requirements of Appendix A, Long Term Control Plan, which is attached to, and incorporated into this Decree.
11. Elkhart shall complete all LTCP construction projects in Table 1-3 of Appendix A on or before December 31, 2029 unless a different schedule is approved by the United States and Indiana or ordered by the Court for the Remaining LTCP Projects pursuant to the procedures in Section XIX (Schedule Reconsideration Based on Financial Circumstances) of this Consent Decree.
12. Final Post-Construction Monitoring Report. Within 3 years after Achievement of Full Operations of all CSO Control Measures in Table 1-3 of Appendix A, Elkhart shall Submit a Final Post-Construction Monitoring Report to the United States and Indiana, for approval, that:
- a. demonstrates that Elkhart implemented the Post-Construction Monitoring Plan in compliance with the schedule and terms set forth therein;



- b. evaluates whether or not the CSO Control Measures and other remedial measures required by Appendix A, as constructed, operated, or otherwise implemented, meet the design and Performance Criteria required by Appendix A;
- c. summarizes the data collected during the entirety of the Post-Construction Monitoring Plan required by section 2 of Appendix A and includes any new data relevant to the evaluation that Elkhart did not previously submit to EPA or IDEM;
- d. evaluates whether or not Elkhart has any Unlisted Discharges;
- e. evaluates whether or not Elkhart's remaining CSO Discharges, if any, comply with all applicable requirements in Appendix A and Elkhart's Current Permits; and
- f. evaluates whether or not Elkhart has eliminated Bypasses, or to the extent that Elkhart has not eliminated Bypasses, evaluates whether or not Elkhart's remaining Bypasses meet the conditions governing Bypass in Elkhart's Current Permits;

Approval of the Post-Construction Monitoring Report only constitutes EPA and IDEM's determination that the report contains the information required by this Paragraph; approval does not constitute, imply, or mean EPA or IDEM's endorsement that Elkhart correctly implemented the Post-Construction Monitoring Plan; that the data in the report was properly collected, derived, or analyzed; that the conclusions in the report are correct; or that Elkhart has complied with any other requirement of this Consent Decree, the Clean Water Act, State Law, or Elkhart's Current Permits.

13. Supplemental Compliance Plans In the Event of Non-Compliance. At any time prior to termination of this Consent Decree, including prior to completing the Facility

improvements and other remedial measures required by Appendix A, Long Term Control Plan, EPA or IDEM may require Elkhart to Submit, subject to Elkhart's right to initiate dispute resolution pursuant to Section XI of this Decree, for EPA and IDEM's approval a Supplemental Compliance Plan(s) within a reasonable time, as determined by EPA and IDEM, from the date that EPA or IDEM Submit to Elkhart a notice that EPA or IDEM have determined, based on available information, that any Facility improvement or other remedial measure required pursuant to Appendix A, Long Term Control Plan, or any previously approved Supplemental Compliance Plan, as constructed, operated, or otherwise implemented has not resulted in, or may not result in, Elkhart's compliance with Appendix A, Long Term Control Plan or Elkhart's Current Permits. After receiving EPA and IDEM's approval, Elkhart shall implement the Supplemental Compliance Plan(s) in accordance with the schedule(s) specified in the approved Supplemental Compliance Plan(s).

14. Any and all Supplemental Compliance Plans that Elkhart is required to submit to Plaintiffs pursuant to the preceding Paragraph shall, at a minimum, include the following:
  - a. identification of additional Facility improvements and other remedial measures necessary to ensure that Elkhart will meet all design and performance criteria required by Appendix A, Long Term Control Plan and will comply with Appendix A, Long Term Control Plan and Elkhart's Current Permits;
  - b. as expeditious a schedule as possible for design, construction, and implementation of the Facility improvements and other remedial measures identified in accordance with the preceding Subparagraph. If simultaneous design and

construction of all Facility improvements and other remedial measures in the Supplemental Compliance Plan is not possible, Elkhart shall develop a phased schedule based on the relative importance of each remedial measure, with highest priority being given to eliminating discharges to sensitive areas identified in the LTCP to the extent such areas are addressed in the Supplemental Compliance Plan and then to those projects that provide the greatest public health or environmental benefits. At a minimum, the schedule shall specify deadlines for the following construction and implementation milestones:

1. commencement of construction; and
  2. achievement of full operation; and
- c. a plan and schedule for performing any post-construction monitoring, and for submitting data resulting from such additional monitoring, in addition to the post-construction monitoring already required in Appendix A, Long Term Control Plan, necessary to assess whether or not the Facility improvements and other remedial measures in the Supplemental Compliance Plan:
1. meet the required design and performance criteria; and
  2. are sufficient to achieve compliance with the requirements of Elkhart's Current Permits.

15. Requirements After Completing the Long Term Control Plan. After completing all requirements of Appendix A, Long Term Control Plan and any and all approved Supplemental Compliance Plans:

- a. Elkhart shall properly operate and maintain the Facility including all improvements and other remedial measures implemented pursuant to Appendix A, Long Term Control Plan;
- b. Elkhart shall have no Unlisted Discharges;
- c. Elkhart's remaining CSO Discharges, if any, shall comply with Appendix A, Long Term Control Plan and Elkhart's Current Permits; and
- d. Elkhart shall have eliminated Bypasses that do not comply with Elkhart's Current Permits.

**C. OTHER PROVISIONS**

**1. Approval of Deliverables**

16. After review of any plan, report, or other document that Elkhart is required to Submit to EPA and IDEM pursuant to either this Section, Appendix A, Long Term Control Plan, or the CSO Operational Plan referenced in Paragraph 9 of this Decree, EPA and IDEM shall in writing:
- a. approve the submission;
  - b. approve the submission on specified conditions;
  - c. approve part of the submission and disapprove the remainder; or
  - d. disapprove the submission.

17. If a submission is approved pursuant to Subparagraph 16.a, Elkhart shall take all actions required by the submission, as approved. If the submission is conditionally approved or approved only in part pursuant to Subparagraph 16.b or Subparagraph 16.c, Elkhart shall, upon written direction of EPA and IDEM, take all actions required by the approved submission that EPA and IDEM determine are technically and practically severable from any disapproved portions, subject to Elkhart's right to invoke dispute resolution under Section XI of this Decree regarding: (1) the specified conditions; (2) the disapproved portions; or (3) EPA and IDEM's determination of severability; and also subject to the United States and Indiana's right to seek stipulated penalties.
18. If the submission is disapproved, in whole or in part pursuant to Subparagraph 16.c or Subparagraph 16.d, Elkhart shall within 30 Days, or such other time as EPA, IDEM, and Elkhart agree to in writing, correct all deficiencies and resubmit the submission, or disapproved portion thereof, for approval, subject to Elkhart's right to invoke dispute resolution and the right of the United States and Indiana to seek stipulated penalties as provided in the preceding Paragraph.
19. If a resubmitted submission, or portion thereof, is disapproved in whole or in part, EPA and IDEM again may require Elkhart to correct any deficiencies, in accordance with the preceding Paragraph, subject to Elkhart's right to invoke Dispute Resolution, and the right of the United States and Indiana to seek Stipulated Penalties as provided in Paragraph 17 of this subsection.

**2. Permits**

20. If any compliance obligation under this Section requires Elkhart to obtain a federal, state, or local permit or approval, Elkhart shall submit timely and complete applications; submit additional documents, information, and data requested by the permitting authority within a reasonable time; and take all other reasonable actions within Elkhart's control to obtain all such permits or approvals. Elkhart may seek relief under the provisions of Section X (Force Majeure) of this Consent Decree for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Elkhart has submitted timely and complete applications; submitted any additional documents, information, and data requested by the permitting authority within a reasonable time; and taken all other reasonable actions within Elkhart's control to obtain all such permits or approvals.

**3. Funding and Other Delays**

21. Elkhart's compliance with the requirements of this Consent Decree is not conditioned on the receipt of federal or state grant funds. Additionally, failure to comply with, or delay in complying with, any requirement of this Consent Decree is not excused by the lack of federal or state grant funds including without limitation construction grants and State Revolving Loan Funds, or any other grants or loans, or by any delay in processing any applications for such funds.
22. Delays caused by inadequate facility planning or plans and specifications on the part of Elkhart shall not be cause for extension of any required compliance date in this Consent Decree.

**VI. CIVIL PENALTIES**

23. Elkhart shall pay the United States a total civil penalty of \$43,500 as follows:

- a. Within 30 Days after the Effective Date of this Consent Decree, Elkhart shall pay the United States the sum of \$21,750 as a civil penalty in the manner specified in Section IX (Payment and Related Matters).
- b. Within 90 Days after the Effective Date of this Consent Decree, Elkhart shall pay the United States the sum of \$21,750 as a civil penalty in the manner specified in Section IX (Payment and Related Matters).

24. Elkhart shall pay Indiana a total civil penalty of \$43,500 as follows:

- a. Within 30 Days after the Effective Date of this Consent Decree, Elkhart shall pay Indiana the sum of \$21,750 as a civil penalty in the manner specified in Section IX (Payment and Related Matters).
- b. Within 90 Days after the Effective Date of this Consent Decree, Elkhart shall pay Indiana the sum of \$21,750 as a civil penalty in the manner specified in Section IX (Payment and Related Matters).

**VII. REPORTING REQUIREMENTS**

25. Elkhart shall submit the following reports:

- a. After lodging of this Decree, and until termination of this Decree pursuant to Section XIX, Elkhart shall Submit to the United States and Indiana a Semi-Annual Report by July 31 of each year for the preceding six months between

January 1 and June 30; and by January 31 of each year for the preceding six months between July 1 and December 31; that shall include:

1. a statement of all deadlines that this Consent Decree requires Elkhart to meet during the six-month period, whether and to what extent Elkhart met those requirements, and the reasons for any noncompliance. Notification to the United States and Indiana of any anticipated delay shall not, by itself, excuse the delay;
  2. a general description of the work completed within the six-month period, and a projection of work to be performed pursuant to this Consent Decree during the next six-month period;
  3. information generated pursuant to the requirements of Appendix A, Long Term Control Plan required by Paragraph 10 of this Decree; and any Supplemental Compliance Plan required by Paragraph 13 of this Decree; and
  4. copies of all Monthly Monitoring Reports and other reports pertaining to CSO Discharges and Bypasses that Elkhart submitted to IDEM in accordance with Elkhart's Current Permits during the six month period.
- b. If Elkhart violates, or has reason to believe it may violate, any requirement of this Consent Decree, Elkhart shall notify the United States and Indiana of such violation and its likely duration in writing within ten Working Days of the day Elkhart first became aware of the violation or potential violation, with an explanation of the violation's likely cause and of the remedial steps taken, or



planned, to prevent or minimize the violation. If the cause of the violation cannot be fully explained at the time the report is due, Elkhart shall include a statement to that effect in the report. Elkhart shall investigate to determine the cause of the violation and then shall submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the day Elkhart becomes aware of the cause of the violation. Nothing in this Paragraph or the next Paragraph relieves Elkhart of its obligation to provide the requisite notice for purposes of Section X (Force Majeure).

26. All reports shall be Submitted to the persons designated in Section XV (Notices) of this Consent Decree.
27. Each report submitted by Elkhart pursuant to Paragraph 25 of this Decree shall be signed by an appropriate Elkhart official and include the following certification:

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that this document and its attachments were prepared either by me personally or under my direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gathered and presented the information contained therein. I further certify, based on my personal knowledge or on my inquiry of those individuals immediately responsible for obtaining the information, that the information is true, accurate, and complete. I am aware that there

are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing and willful submission of materially false statements.

28. The reporting requirements of this Consent Decree do not relieve Elkhart of any reporting obligations required by the Clean Water Act or its implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.
29. The United States and Indiana may use any information generated by Elkhart and provided to Plaintiffs pursuant to this Consent Decree in any proceeding to enforce the provisions of this Consent Decree, in any proceeding pursuant to Section XI (Dispute Resolution) of this Decree, and as otherwise permitted by law. Elkhart shall not object to the admissibility into evidence of any such information in any of the proceedings described in the preceding sentence.

#### **VIII. STIPULATED PENALTIES**

30. If Elkhart fails to pay the civil penalty required pursuant to Section VI (Civil Penalties) of this Decree when due, Elkhart shall pay a stipulated penalty of \$2,000 per day for each day that the payment is late, in the manner specified in Section IX (Payment and Related Matters).
31. Elkhart shall be liable for Stipulated Penalties to the United States and Indiana as specified below, unless excused under Section X (Force Majeure) of this Decree. A violation includes failing to perform any obligation required by this Decree, including Appendix A, Long Term Control Plan or any Supplemental Compliance Plan required by this Decree, and any schedules in those plans, according to all applicable requirements of

this Decree and within the specified schedules established by, or approved pursuant to this Decree.

32. Reporting Requirements and Other Requirements. The following Stipulated Penalties shall accrue per violation per day for each violation of the requirements of this Consent Decree identified in Subparagraphs a and b of this Paragraph, but stipulated penalties for reporting or submission violations shall not begin to accrue until 30 days after the date that any timely submission initially is disapproved, in whole or in part, pursuant to Paragraph 16.c or Paragraph 16.d of this Decree and stipulated penalties shall not accrue at all if the first resubmission of a timely submission that initially was disapproved, in whole or in part, is approved pursuant to Paragraphs 16.a or 16.b of this Decree:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$500	1 <sup>st</sup> through 30 <sup>th</sup> day
\$1,000	31 <sup>st</sup> through 60 <sup>th</sup> day
\$2,000	61 <sup>st</sup> day and beyond

- a. Violation of any provision in Section VII (Reporting Requirements) of this Consent Decree; and
- b. Violation of any provision of this Consent Decree not specified in the next Paragraph of this Decree.
33. Substantive Requirements. The following Stipulated Penalties shall accrue per violation per day for each violation of the requirements of Section V (Compliance Requirements) of this Consent Decree, but stipulated penalties for violations of Paragraph 15 of this Decree shall not begin to accrue until six months after the deadline for Achievement of

Full Operations stated in Appendix A, Long Term Control Plan and any and all approved Supplemental Compliance Plans:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$1,000	1 <sup>st</sup> through 14 <sup>th</sup> day
\$2,000	15 <sup>th</sup> through 30 <sup>th</sup> day
\$4,000	31 <sup>st</sup> day and beyond

34. Except as otherwise provided in this Decree, Stipulated Penalties pursuant to this Section shall begin to accrue on the day after performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated Penalties shall accrue simultaneously for separate violations of this Consent Decree. Elkhart shall pay any stipulated penalties in the manner specified in Section IX (Payment and Related Matters) within 30 Days of receiving a written demand from either the United States or Indiana. The United States, or Indiana, or both, may seek Stipulated Penalties under this Section. Either sovereign may waive Stipulated Penalties, or reduce the amount of Stipulated Penalties sought, in the exercise of their unreviewable discretion, and in accordance with this Paragraph.
- Where both sovereigns seek Stipulated Penalties for the same violation of this Consent Decree, Elkhart shall pay 50 percent to the United States and 50 percent to Indiana.
- Where only one sovereign demands Stipulated Penalties for a violation, and the other sovereign does not join in the demand within ten Working Days of receiving the demand, or timely joins in the demand but subsequently elects to waive or reduce Stipulated Penalties for that violation, Elkhart shall pay the Stipulated Penalties due for the violation

to the sovereign making the initial demand, less any amount paid to the other sovereign. The determination of one sovereign not to seek Stipulated Penalties, or subsequently to waive or reduce the amount sought, shall not preclude the other sovereign from seeking Stipulated Penalties.

35. Stipulated penalties shall continue to accrue as provided in the preceding Paragraph during any Dispute Resolution, but need not be paid until the following:
- a. if the dispute is resolved by a written agreement, Elkhart shall pay accrued penalties determined to be owing within 30 Days of the date that Elkhart signs the written agreement;
  - b. if the dispute is resolved because the position that Elkhart advocated in a Notice of Dispute submitted to Plaintiffs during informal dispute resolution is deemed to be rejected by Plaintiffs pursuant to Paragraph 46 of this Decree, and Elkhart does not seek judicial review within the time provided in Paragraph 47 of this Decree, Elkhart shall pay accrued penalties determined to be owing, together with Interest, within 51 Days of the date that Elkhart Submitted the Notice of Dispute to Plaintiffs;
  - c. if Elkhart seeks judicial review pursuant to Paragraph 47 of this Decree and the United States or Indiana prevails in whole or in part, Elkhart shall pay all accrued penalties that the Court determines to be owing, together with Interest, within 60 Days of the date of the Court's decision or order, except as provided in Subparagraph d of this Paragraph; or

- d. if any Party appeals the District Court's decision, Elkhart shall pay any and all accrued penalties that the Court determines to be owing within 20 Days of the date of the final appellate court decision.
- 36. Elkhart shall pay Stipulated Penalties occurring between the Date of Lodging and the Effective Date of this Consent Decree within 30 Days of the Effective Date of this Decree in the manner specified in Section IX (Payment and Related Matters).
- 37. Subject to the provisions of Section XIII (Effect of Settlement/ Reservation of Rights) of this Consent Decree, the Stipulated Penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States and Indiana for Elkhart's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Clean Water Act or State Law, Elkhart shall be allowed a credit for any Stipulated Penalties paid, against any statutory penalties imposed for such violation.

**IX. PAYMENT AND RELATED MATTERS**

- 38. Elkhart shall make the payments to the United States required by Section VI (Civil Penalties) and Section VIII (Stipulated Penalties) by FedWire Electronic Funds Transfer to the United States Department of Justice (DOJ) in accordance with instructions to be provided to Elkhart by the Financial Litigation Unit of the United States Attorney's Office for the Northern District of Indiana. At the time of payment, Elkhart simultaneously shall Submit written notice of payment and a copy of any transmittal documentation (which should reference United States Attorney's Office File Number 2003V00803; DOJ Reference Number 90-5-1-1-08202; the case number that the

Court assigns to the case, and state that the payment is for either a Civil Penalty or Stipulated Penalties) to the United States in accordance with Section XV (Notices) of this Decree.

39. Elkhart shall make the payments to Indiana required by Section VI (Civil Penalties) and Section VIII (Stipulated Penalties) by certified check payable to the “Indiana Department of Environmental Management Special Fund” and Submitted to:

Cashier  
Indiana Department of Environmental Management  
100 North Senate Avenue  
MC 50-10C  
Indianapolis, Indiana 46204-2251

At the time of payment, Elkhart simultaneously shall Submit a copy of the check and any transmittal documentation (which should reference United States Attorney’s Office File Number 2003V00803; the case number that the Court assigns to the case, and state that the payment is for either a Civil Penalty or Stipulated Penalties) to Indiana in accordance with Section XV (Notices) of this Decree.

40. If Elkhart fails to pay stipulated penalties according to the terms of this Consent Decree, Elkhart shall be liable for Interest on such penalties accruing as of the date payment became due pursuant to Paragraph 34 of this Decree, unless the dispute resolution procedures in this Decree are properly and timely invoked. If the dispute resolution procedures in this Decree are properly and timely invoked, Interest only shall begin to accrue on the date any stipulated penalties become due pursuant to Paragraph 35 of this Decree.

**X. FORCE MAJEURE**

41. A “force majeure event” is any event beyond the control of Elkhart, its contractors, or any entity controlled by Elkhart that delays the performance of any obligation under this Consent Decree despite Elkhart’s best efforts to fulfill the obligation. “Best efforts” includes anticipating any reasonably foreseeable force majeure events and addressing the effects of any such event (a) as it is occurring and (b) after it has occurred, to prevent or minimize any resulting delay to the greatest extent possible. “Force Majeure” does not include Elkhart’s financial inability to perform any obligation under this Consent Decree.
42. Elkhart shall Submit written notice of a force majeure event to the United States and Indiana, as provided in Section XV (Notices) of this Consent Decree, within 10 Working Days after the time Elkhart first knew of, or by the exercise of due diligence, should have known of, the event. The notice shall state the anticipated duration of any delay; its cause(s); Elkhart’s past and proposed actions to prevent or minimize any delay; a proposed schedule for carrying out those actions; and Elkhart’s rationale for attributing any delay to a force majeure event. Failure to provide written notice as required by this Paragraph shall preclude Elkhart from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure.
43. If Plaintiffs agree that a force majeure event has occurred, the United States and Indiana shall agree in writing to extend the time for Elkhart to perform the affected requirements for the time necessary to complete those obligations. An extension of time to perform obligations affected by a force majeure event shall not, by itself, extend the time to



perform any other obligation. If Plaintiffs agree to an extension of time in writing and the modification is material, the appropriate modification shall be made pursuant to Section XVIII (Modification) of this Consent Decree.

44. If Plaintiffs do not agree that a force majeure event has occurred, or do not agree to the extension of time sought by Elkhart, the position of the United States shall control unless Elkhart invokes Dispute Resolution under Section XI of this Consent Decree. In any such dispute, Elkhart bears the burden of proving, by a preponderance of the evidence, that:
- a. each claimed force majeure event is a force majeure event;
  - b. Elkhart gave the notice required by Paragraph 42;
  - c. the force majeure event caused any delay that Elkhart claims was attributable to that event; and
  - d. Elkhart exercised best efforts to prevent or minimize any delay caused by the event.

#### **XI. DISPUTE RESOLUTION**

45. Unless otherwise expressly provided for in this Consent Decree, the procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Such procedures, however, shall not apply to actions by the United States and Indiana to enforce obligations of Elkhart that have not been disputed in accordance with this Section.
46. Informal Dispute Resolution. Any dispute subject to dispute resolution under this Consent Decree first shall be the subject of informal negotiations. The dispute shall be considered to have arisen when Elkhart Submits a written Notice of Dispute to the United

States and Indiana. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 21 Days from the date the dispute arises, unless the period is modified by written agreement of the Parties. During the informal negotiation period, or any agreed extension of that period pursuant to this Paragraph, if the Parties do not resolve the issues raised in the Notice of Dispute with a written agreement, the position that Elkhart advocated in the Notice of Dispute shall be deemed to be rejected by Plaintiffs. Such resolution of the dispute shall be binding unless Elkhart seeks judicial review in the manner prescribed in the next Paragraph of this Decree within 30 Days after the conclusion of the informal negotiation period. Any negotiation period that precedes the date that Elkhart Submits a written Notice of Dispute shall not be considered to be part of the informal negotiation period.

47. Elkhart may seek judicial review of a dispute by filing with the Court and serving on Plaintiffs, in accordance with Section XV (Notices) of this Consent Decree, a motion requesting judicial resolution of the dispute. The motion must be filed within 30 Days of the conclusion of the informal negotiation period as defined in the preceding Paragraph. The motion shall contain a written statement of Elkhart's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documents, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.
48. Plaintiffs shall respond to Elkhart's motion within the time period allowed by the Local Rules of this Court, or any extension of time to which the parties agree or the Court orders. Elkhart may file a reply memorandum within the time period allowed by the

Local Rules of this Court, or any extension of time to which the parties agree, or the Court orders.

49. In any motion for judicial review, Elkhart shall bear the burden of demonstrating that its position complies with the requirements of this Consent Decree and that Elkhart is entitled to relief under applicable law.
50. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Elkhart under this Consent Decree unless and until final resolution of the dispute so provides. Stipulated Penalties with respect to the disputed matter shall continue to accrue from the first day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 35 of this Consent Decree. If Elkhart does not prevail on the disputed issue, Stipulated Penalties shall be assessed and paid as provided in Section VIII (Stipulated Penalties), unless otherwise provided by the Court.

## **XII. INFORMATION COLLECTION AND RETENTION**

51. The United States, Indiana, and their representatives including attorneys, contractors, and consultants, shall have the right of entry to any facility covered by this Consent Decree, at all reasonable times upon presentation of credentials, to:
  - a. monitor the progress of activities required under this Consent Decree;
  - b. verify any data or information submitted to the United States or Indiana in accordance with this Consent Decree, including Appendix A, Long Term Control Plan, or Elkhart's Current Permits;

- c. obtain samples and, upon request, splits of any samples taken by Elkhart or its representatives, contractors, or consultants;
  - d. obtain documentary evidence, including photographs and similar data; and
  - e. assess Elkhart's compliance with this Consent Decree, including Appendix A, Long Term Control Plan, or Elkhart's Current Permits.
52. Upon request, Elkhart shall provide EPA and Indiana or their authorized representatives splits of any samples taken by Elkhart. Upon request, EPA and Indiana shall provide Elkhart splits of any samples taken by EPA or Indiana. Upon request by Elkhart, EPA and Indiana also shall provide Elkhart with copies of any documentary evidence taken from the Facility, including photographs and any other documents that are not privileged or otherwise exempt from disclosure.
53. Unless the Parties agree in writing to the contrary, Defendant shall retain all underlying documents from which it has compiled any report or other submission required by this Consent Decree until five years after termination of the Decree. At any time during this record retention period, the United States or Indiana may request copies of any documents or records required to be maintained under this Paragraph. Within 30 Days of the date of such a request, Elkhart shall provide to the requesting Plaintiff all documents responsive to the request. If Elkhart asserts that any of the requested documents are privileged, in lieu of producing the document(s) regarding which Elkhart asserts a privilege, Elkhart may, within 30 Days of the date of the request, provide to the requesting Plaintiff a privilege log containing the information required by the next Paragraph.

54. Elkhart may assert that certain documents or records are privileged under the attorney-client privilege or any other privilege recognized by federal law. For each document regarding which Elkhart asserts such a privilege, Elkhart shall include the following information on a privilege log:

- a. the title of the document or record;
- b. the date of the document or record;
- c. the name and title of the author of the document or record;
- d. the name and title of each addressee or recipient;
- e. a description of the subject of the document or record; and
- f. the privilege asserted by Elkhart.

Nevertheless, Elkhart shall not withhold on the grounds that they are privileged any documents or records created or generated pursuant to the requirements of this Consent Decree.

55. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information or documents, held by the United States or Indiana pursuant to applicable federal or state laws, regulations, or permits, nor does this Decree limit or affect any duty or obligation of Elkhart to maintain documents, records, or information imposed by applicable federal or state laws, regulations, or permits.

### **XIII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS**

56. This Consent Decree resolves all of the civil claims of the United States and Indiana for the violations alleged in the Complaint filed in this case through the date of lodging.

57. This Consent Decree shall not be construed to prevent or limit the rights of the United States and Indiana to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in this Consent Decree.
58. Elkhart is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Elkhart's compliance with this Consent Decree shall be no defense to any action commenced by the United States or Indiana pursuant to those laws, regulations, or permits. Elkhart may seek to admit evidence of its compliance with this Consent Decree in any such action, and the United States or Indiana may object to the introduction of such evidence. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. The United States and Indiana do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Elkhart's compliance with any aspect of this Consent Decree will result in compliance with any provisions of the Clean Water Act, State Law, or Elkhart's Current Permits.
59. Nothing in this Consent Decree including Appendix A, Long Term Control Plan, which is attached to and incorporated into this Decree, or either, or both Plaintiffs' review or approval of any CSO Operational Plan, Post-Construction Monitoring Plan, Supplemental Compliance Plan, or other plan, Semi-Annual Report, Post-Construction Monitoring Report, or other report, or document pursuant to this Decree, shall be construed as relieving Elkhart of the obligation to comply with the Clean Water Act, State Law, or Elkhart's Current Permits.

60. This Consent Decree does not limit or affect the rights of any Party against any third parties, not party to this Consent Decree.
61. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party that is not a Party to this Consent Decree.
62. The United States and Indiana reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in this Decree. The United States and Indiana reserve all legal and equitable remedies to address any act or omission that is presenting an imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Elkhart's Facility, whether related to the violations addressed in this Consent Decree or otherwise.

#### **XIV. COSTS**

63. The parties shall bear their own costs and attorneys' fees in this case and all other matters related to this Consent Decree, except that the United States and Indiana shall be entitled to collect the reasonable costs and attorneys' fees incurred in any action necessary to collect any portion of the civil penalties or any portion of any Stipulated Penalties due but not paid by Elkhart.

#### **XV. NOTICES**

64. Unless otherwise specified in this Decree, whenever notifications, submissions, or

communications are required by this Consent Decree, they shall be made in writing, sent by either first class United States mail or courier, and addressed as follows:

To the United States:

Via United States Postal Service:

Chief, Environmental Enforcement Section  
Environment and Natural Resources Division  
United States Department of Justice  
Post Office Box 7611, Ben Franklin Station  
Washington, D.C. 20044-7611  
Re: DOJ No. 90-5-1-1-08182

Via Courier:

Chief, Environmental Enforcement Section  
Environment and Natural Resources Division  
United States Department of Justice  
601 D Street, N.W.  
Washington, D.C. 20004  
Re: DOJ No. 90-5-1-1-08182

and

United States Attorney  
Northern District of Indiana  
5400 Federal Plaza, Suite 1500  
Hammond, Indiana 46320  
Re: USAO File No. 2003V00804

and

Chief  
Water Enforcement and Compliance Assurance Branch  
Water Division  
United States Environmental Protection Agency, Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604



To EPA:

Chief  
Water Enforcement and Compliance Assurance Branch  
Water Division  
United States Environmental Protection Agency, Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604

To Indiana:

Chief, Permits Branch  
Office of Water Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue  
MC 65-42 IGCN 1255  
Indianapolis, Indiana 46204-2251

and

Office of Legal Counsel  
Indiana Department of Environmental Management  
100 North Senate Avenue  
Post Office Box 6015  
Indianapolis, Indiana 46206

To Elkhart:

Corporation Counsel  
City of Elkhart  
229 South Second Street  
Elkhart, Indiana 46516

and

City Engineer  
1201 South Nappanee Street  
Elkhart, Indiana 46516

65. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

**XVI. EFFECTIVE DATE**

66. The Effective Date of this Consent Decree shall be the date on which this Consent Decree is entered by the Court.

**XVII. RETENTION OF JURISDICTION**

67. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XI and XVIII of this Decree, or effectuating or enforcing compliance with the terms of this Decree.

**XVIII. MODIFICATION**

68. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by all the Parties. If the modification constitutes a material change to any term of this Decree, the modification only shall be effective after approval by the Court. The terms and schedules contained in Appendix A of this Decree may be modified upon written agreement of the Parties without Court approval, unless any such modification effects a material change to the terms of this Consent Decree or materially affects Elkhart's ability to meet the requirements or objectives of this Decree.

**XIX. SCHEDULE RECONSIDERATION BASED ON FINANCIAL CIRCUMSTANCES**

69. No earlier than 9 years after the Effective Date of this Consent Decree, and no later than 13 years after the Effective Date of this Consent Decree, Elkhart may Submit to the United States and Indiana a request for approval of an extension of any of the deadlines

for completing any of the Remaining LTCP Projects. In any request for a deadline extension, Elkhart shall:

- a. demonstrate that Elkhart will complete the required task as soon as reasonably possible but in no event later than July 1, 2033; and
- b. include an updated Financial Capability Assessment.

70. If the United States and Indiana grant Elkhart's request for an extension for completing any of the deadlines for the Remaining LTCP Projects pursuant to this Section, the Parties shall reduce the agreement to a writing signed by an authorized representative of each Party. Such an agreement shall be considered a minor modification to this Consent Decree and shall not require further approval of the Court.
71. If either the United States or Indiana denies Elkhart's request for an extension for completing any of the deadlines for the Remaining LTCP Projects pursuant to this Section, or if more than 90 Days elapse from the date that Elkhart Submitted its application to the United States and Indiana for an extension of deadlines pursuant to this Section and Elkhart does not either (1) receive a written denial of Elkhart's schedule extension request from either the United States or Indiana; or (2) enter into a written agreement pursuant to Paragraph 70 of this Section, Elkhart may seek judicial review of the dispute pursuant to Paragraphs 47-49 of this Consent Decree.

72. If Elkhart seeks judicial review of a dispute pursuant to the preceding Paragraph, the Court may, in its discretion, grant an extension of any of the deadlines for any of the Remaining LTCP Projects, in whole or in part, but only if Elkhart demonstrates that:
- a. Elkhart Submitted to the United States and Indiana an updated Financial Capability Assessment with its request for a schedule modification;
  - b. the new deadline requires Elkhart to complete the required task as soon as reasonably possible but in no event later than July 1, 2033;
  - c. Elkhart Submitted its schedule extension request to the United States and Indiana no earlier than 9 years after the Effective Date of this Consent Decree, and no later than 13 years after the Effective Date of this Consent Decree; and
  - d. the United States or Indiana denied in writing Elkhart's request for approval of a schedule extension and Elkhart filed a motion seeking judicial review of the dispute no later than 30 days after the date of the earliest written communication in which either the United States or Indiana denied Elkhart's request for a schedule extension; or
  - e. the United States and Indiana did not Submit to Elkhart a written decision regarding Elkhart's request for a schedule extension within 90 Days of the date that Elkhart Submitted its request for a schedule extension to the United States and Indiana.
73. If Elkhart invokes dispute resolution procedures pursuant to Paragraph 71 of this Section for a denial of a schedule extension request, the invocation of dispute resolution procedures shall not extend, postpone, or affect in any way any of Elkhart's obligations

pursuant to this Consent Decree unless and until final resolution of the dispute so provides.

**XX. TERMINATION**

74. Elkhart may Submit to the United States and Indiana a Request for Termination, with all necessary supporting documentation, only after Elkhart:

- a. complies with all provisions of Section V (Compliance Requirements) of this Consent Decree;
- b. demonstrates that the CSO Control Measures in Appendix A, Long Term Control Plan and any and all Supplemental Compliance Plan(s), as built or otherwise implemented, in fact meet the Design Criteria for those CSO Control Measures required by Appendix A, Long Term Control Plan or the relevant Supplemental Compliance Plan;
- c. demonstrates that the CSO Control Measures in Appendix A, Long Term Control Plan and any and all Supplemental Compliance Plan(s), as operated, meet the Performance Criteria for those CSO Control Measures required by Appendix A, Long Term Control Plan or the relevant Supplemental Compliance Plan;
- d. demonstrates that, from the time Elkhart achieves satisfactory compliance, as determined by Plaintiffs, with all applicable requirements of the Clean Water Act, State Law, Elkhart's Current Permits, and this Decree, Elkhart continuously has maintained such compliance for at least one year;
- e. has paid the civil penalties required by Section VI (Civil Penalties) of this Decree; and

f. has paid any accrued Stipulated Penalties required by Section VIII (Stipulated Penalties) of this Decree.

75. After Plaintiffs receive Elkhart's Request for Termination, the Parties shall confer informally concerning the Request for Termination and any disagreement that the Parties may have regarding whether or not Elkhart has complied with the requirements for termination of this Consent Decree. If the United States and Indiana agree that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

76. After the parties informally confer as required by the preceding Paragraph, if Plaintiffs do not agree that the Decree may be terminated, Elkhart may seek judicial review of the dispute pursuant to, and in accordance with the requirements of, Paragraph 47 of this Decree. Elkhart shall not seek judicial review, however, earlier than 60 days after Elkhart submits the Request for Termination to the United States and Indiana. This Consent Decree shall remain in effect pending resolution of the dispute unless and until the Court enters an Order terminating the Decree.

## **XXI. PUBLIC PARTICIPATION**

77. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent to this Decree if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Elkhart consents to entry of this Consent Decree without further notice.

## **XXII. SIGNATORIES/SERVICE**

78. Each undersigned representative of Elkhart, the Assistant Attorney General for the Environment and Natural Resources Division of the United States Department of Justice on behalf of the United States, and the Chief Operating Officer of the Indiana Attorney General's Office on behalf of Indiana certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents.
79. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis.
80. Elkhart agrees not to oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Elkhart in writing that the United States no longer supports entry of the Decree.
81. Elkhart agrees to accept service of process by certified mail, to the agent authorized to accept service on behalf of the City of Elkhart indicated underneath the signatures of Elkhart's representatives on this Consent Decree, with respect to all matters arising under or related to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including without limitation service of a summons.

## **XXIII. INTEGRATION/APPENDIX**

82. This Consent Decree and its attached Appendix A, constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersede all prior agreements and understandings, whether

oral or written, concerning the settlement embodied in this Decree. Other than Appendix A, which is attached to and incorporated into this Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

#### **XXIV. FINAL JUDGMENT**

83. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, Indiana, and Elkhart.

#### **XXV. APPENDIX**

84. Appendix A, Long Term Control Plan referenced in Paragraph 10 of this Decree is attached to, and incorporated into, this Consent Decree.

Dated and entered this 30th day of November, 2011.

s/ Joseph S. Van Bokkelen  
UNITED STATES DISTRICT JUDGE  
Northern District of Indiana



THE UNDERSIGNED PARTIES enter into this Consent Decree in *United States, et al. v. City of Elkhart, IN* (N.D. Ind.):

FOR THE UNITED STATES OF AMERICA

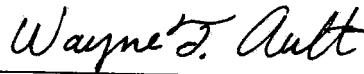
A handwritten signature in black ink, reading "Ignacia S. Moreno". The signature is written in a cursive style with a horizontal line underneath the name.

IGNACIA S. MORENO  
Assistant Attorney General  
Environment and Natural Resources Division  
United States Department of Justice

THE UNDERSIGNED PARTIES enter into this Consent Decree in *United States, et al. v. City of Elkhart, IN* (N.D. Ind.):

FOR THE UNITED STATES OF AMERICA

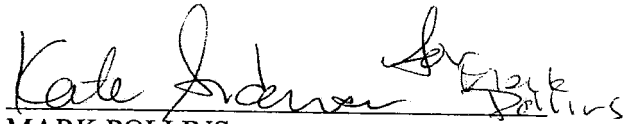
DAVID CAPP  
United States Attorney  
Northern District of Indiana

A handwritten signature in black ink, reading "Wayne T. Ault", is positioned above a horizontal line.

WAYNE T. AULT  
Assistant United States Attorney  
5400 Federal Plaza, Suite 1500  
Hammond, Indiana 46320  
Telephone: 219-937-5500  
Telecopy: 219-852-2770  
Internet Address: Wayne.Ault@usdoj.gov

THE UNDERSIGNED PARTIES enter into this Consent Decree in *United States, et al. v. City of Elkhart, IN* (N.D. Ind.):

FOR THE UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY

A handwritten signature in black ink, appearing to read "Mark Pollins", written over a horizontal line.

MARK POLLINS

Division Director  
Water Enforcement Division  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
United States Environmental Protection Agency

A handwritten signature in black ink, appearing to read "Brian Joffe", written over a horizontal line.

BRIAN JOFFE

Attorney-Advisor  
Water Enforcement Division  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
United States Environmental Protection Agency

THE UNDERSIGNED PARTIES enter into this Consent Decree in *United States, et al. v. City of Elkhart, IN* (N.D. Ind.):

FOR THE UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY



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SUSAN HEDMAN  
Regional Administrator  
United States Environmental Protection Agency  
Region 5



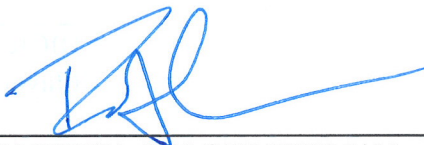
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KATHLEEN KELLY SCHNIEDERS  
Associate Regional Counsel  
Office of Regional Counsel  
Region 5  
United States Environmental Protection Agency  
77 West Jackson Boulevard (C-14J)  
Chicago, Illinois 60604-3590

THE UNDERSIGNED PARTIES enter into this Consent Decree in *United States, et al. v. City of Elkhart, IN* (N.D. Ind.):

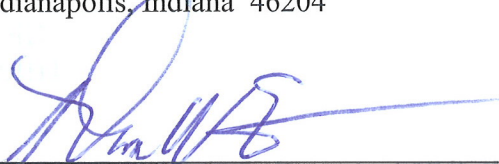
FOR THE STATE OF INDIANA

GREGORY F. ZOELLER  
Attorney General of Indiana



---

PATRICIA ORLOFF ERDMAN  
Chief Counsel for Litigation  
Office of the Attorney General  
Indiana Government Center South  
302 West Washington Street  
Indianapolis, Indiana 46204



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THOMAS W. EASTERLY  
Commissioner  
Indiana Department of Environmental Management



---

ELIZABETH ADMIRE  
Attorney  
Indiana Department of Environmental Management


Agent authorized to accept service on behalf of the State of Indiana:

PATRICIA ORLOFF ERDMAN  
Chief Counsel for Litigation  
Office of the Attorney General  
Indiana Government Center South  
302 West Washington Street  
Indianapolis, Indiana 46204

THE UNDERSIGNED PARTIES enter into this Consent Decree in *United States, et al. v. City of Elkhart, IN* (N.D. Ind.):

FOR THE CITY OF ELKHART


  
\_\_\_\_\_  
DICK MOORE  
Mayor

  
\_\_\_\_\_  
VLADO VRANJES  
Corporation Counsel

THE CITY OF ELKHART, ACTING BY AND  
THROUGH ITS BOARD OF PUBLIC WORKS

  
\_\_\_\_\_  
MICHAEL C. MACHLAN  
President

ATTEST:

  
\_\_\_\_\_  
NANCY A. WILSON  
Clerk of the Board

Agent authorized to accept service on behalf of the City of Elkhart:

Corporation Counsel  
City of Elkhart  
229 South Second Street  
Elkhart, Indiana 46516

# **APPENDIX A**

## Appendix A: Section 1: Long Term Control Plan



### 1.1 CSO Control Measures

The selected plan features a combination of the following CSO controls:

- Continuing the City's ongoing program of partial or complete sewer separation in several CSO Basins;
- Sewer flow redirection, which will send some flows to the wastewater treatment plant via a route that avoids the combined sewer area;
- Regional storage tanks to capture and store sewage overflows during wet weather;
- Sewer system conveyance improvements; and
- Wastewater treatment plant improvements.

Elkhart shall complete implementing these controls at a total estimated cost of \$155.6 million in 2007 dollars on or before December 31, 2029 unless a different schedule is approved by the United States and Indiana or ordered by the Court for the Remaining LTCP Projects pursuant to the procedures in Section XIX, Schedule Reconsideration Based on Financial Circumstances of the Decree. Estimated costs for each major plan component are shown in Table 7-1. Estimated costs include the present worth costs of operating and maintaining the new facilities over a 20-year period.



Table -1-1 LTCP Component Costs by Watershed<sup>1</sup>

	CSO Number	Description	Cost Estimate
<b>Christiana Creek CSO Control</b>			
	CSO 14	High Dive Park 1 MG Storage & Pump	\$ 10,650,000
	CSO 14	High Dive Park Pump Station	\$ 975,000
	CSO 14	Force Main: High Dive Park Pump Station to North Interceptor	\$ 3,255,000
		<b>Christiana Creek Subtotal</b>	<b>\$ 14,880,000</b>
<b>Upper Elkhart River CSO Control</b>			
	CSO 30	Separation	\$ 6,150,000
	CSO 31	EEC 80,000-Gallon Storage & Pump	\$ 2,400,000
	CSO 33	Separation - Partial	\$ 8,760,000
	CSO 4	Separation - Partial	\$ 2,970,000
		<b>Upper Elkhart River Subtotal</b>	<b>\$ 20,280,000</b>
<b>WWTP Plant Upgrades</b>			
	WWTP	Preliminary and Primary Improvements for 60 MGD	\$ 11,100,000
	WWTP	PE Pumping for 60 MGD and PLC for step feed mode	\$ 14,160,000
	WWTP	Additional disinfection for 60 MGD	\$ 4,785,000
		<b>Wet Weather Treatment Subtotal</b>	<b>\$ 30,045,000</b>
<b>Lower Elkhart River Control</b>			
	CSOs 6&7	Direct East Waterfall Dr. to Jackson Blvd. Storage Facility	\$ 495,000
	CSOs 6&7	Jackson Street 1.0 MG storage facility	\$ 10,665,000
	CSOs 6&7	Jackson Street Storage Facility Lift Station	\$ 2,145,000
		<b>Lower Elkhart River Subtotal</b>	<b>\$ 13,305,000</b>
<b>Oakland Avenue Control</b>			
	CSOs 24 & 37	Force Main from Oakland Ave. LS to WWTP	\$ 3,060,000
	CSOs 24 & 37	Interceptor of CSO 37 Overflow (CSO 37.0 )	\$ 840,000
	CSOs 24 & 37	Interceptor of CSO 37 Overflow (CSO 37.02)	\$ 630,000
	CSOs 24 & 37	Interceptor of CSO 37 Overflow (CSO 37.03)	\$ 555,000
	CSOs 24 & 37	Interceptor of CSO 37 Overflow Jackson LS	\$ 1,140,000
	CSOs 24 & 37	Interceptor of Flow to CSO#24 L-TUFF 1	\$ 405,000
	CSOs 24 & 37	Interceptor of Flow to CSO#24 L-TUFF 1B	\$ 1,350,000
	CSOs 24 & 37	LS 8 Force Main To Oakland Ave. Storage facility	\$ 3,255,000
	CSOs 24 & 37	CSO 24 LS 1.1 MG Storage and Pump	\$ 16,080,000
		<b>Oakland Avenue Subtotal</b>	<b>\$ 27,315,000</b>
<b>Upper St Joseph River CSO Control</b>			
	CSO 13	Separation - Partial	\$ 5,010,000
	CSO 25	Effluent Line Upgrade: CSO 25 to Interceptor	\$ 405,000
	CSO 29	Plug Overflow (Jefferson)	\$ 1,500
	CSO 28	Plug Overflow (Washington)	\$ 1,500
	CSO 39	Separation	\$ 960,000
		<b>Upper St. Joseph River Subtotal</b>	<b>\$ 6,378,000</b>
<b>Lower St Joseph River CSO Control</b>			
	CSO 18	Plug Overflow (McNaughton Park)	\$ 1,500
	CSO 27	Plug Overflow (Navajo)	\$ 1,500
	CSOs 17 & 18	Redirect Flow to North Interceptor	\$ 390,000
	CSO 21	Separation	\$ 1,695,000
	CSO 23	Effluent Line Upgrade CSO#23 to LS#4	\$ 165,000
	CSO 23	LS 4 Force Main	\$ 405,000
	CSO 23	LS 4 (8th & Franklin) Improvements	\$ 1,545,000
	CSO 23	Separation - Partial	\$ 3,870,000
		<b>Lower St. Joseph River Subtotal</b>	<b>\$ 8,073,000</b>
<b>Riverside Drive Control</b>			
	CSO 15	AACOA Sewer Interceptor Redirection	\$ 300,000
	CSO 15	Riverside Dr. 0.43 MG Storage & Pump	\$ 6,000,000
	CSO 15	Separation - Partial	\$ 7,575,000
		<b>Riverside Drive Subtotal</b>	<b>\$ 13,875,000</b>
<b>Total Estimated Capital Cost (Includes contingencies)</b>			<b>\$ 134,151,000</b>
<b>Systemwide Estimated Present Worth Operation &amp; Maintenance Costs</b>			<b>\$ 21,449,000</b>
<b>Total Estimated Present Worth Cost (2007 Dollars)</b>			<b>\$ 155,600,000</b>

<sup>1</sup> **Notes:** Capital cost estimates include construction and engineering/legal contingencies. Costs are expressed in 2007 dollars. (Engineering News Record Construction Cost Index: 8000 (Aug. 2007)).

### 1.1.1 Christiana Creek CSO Control Measure

Christiana Creek enters the St. Joseph River downstream from High Dive Park and upstream from a number of city parks and downtown Elkhart. This control measure will control CSO 14 in High Dive Park and will reduce overflows to Priority Areas I, II and III (depicted in Figure 1-2 and Figure 1-3). This control measure includes the following elements:

- One-million-gallon storage facility to capture wet-weather flow from CSO 14 and release it to the existing sewer system after the storm event.
- Redirection of most flows from the CSO 14 basin to the North Interceptor system using a bypass force main.

The City initially planned to redirect only the flow from the Grant Street Lift Station to the North Interceptor. During the preliminary design process underway in late 2008, the City determined that all dry-weather and wet-weather flow during a Typical Year could be redirected to the North Interceptor system and away from the combined sewer system.

The plan for Christiana Creek is illustrated in Figure 1-1. Some of the priority areas that will benefit from this control measure are also shown on the map.

### 1.1.2 Upper St. Joseph River CSO Control Measure

The Upper St. Joseph River extends from the AEP Dam to the Lexington Avenue Bridge. This control measure will control overflows from CSOs 13 and 25 and reduce overflows affecting Priority Areas I, II and III. This control measure includes the following elements:

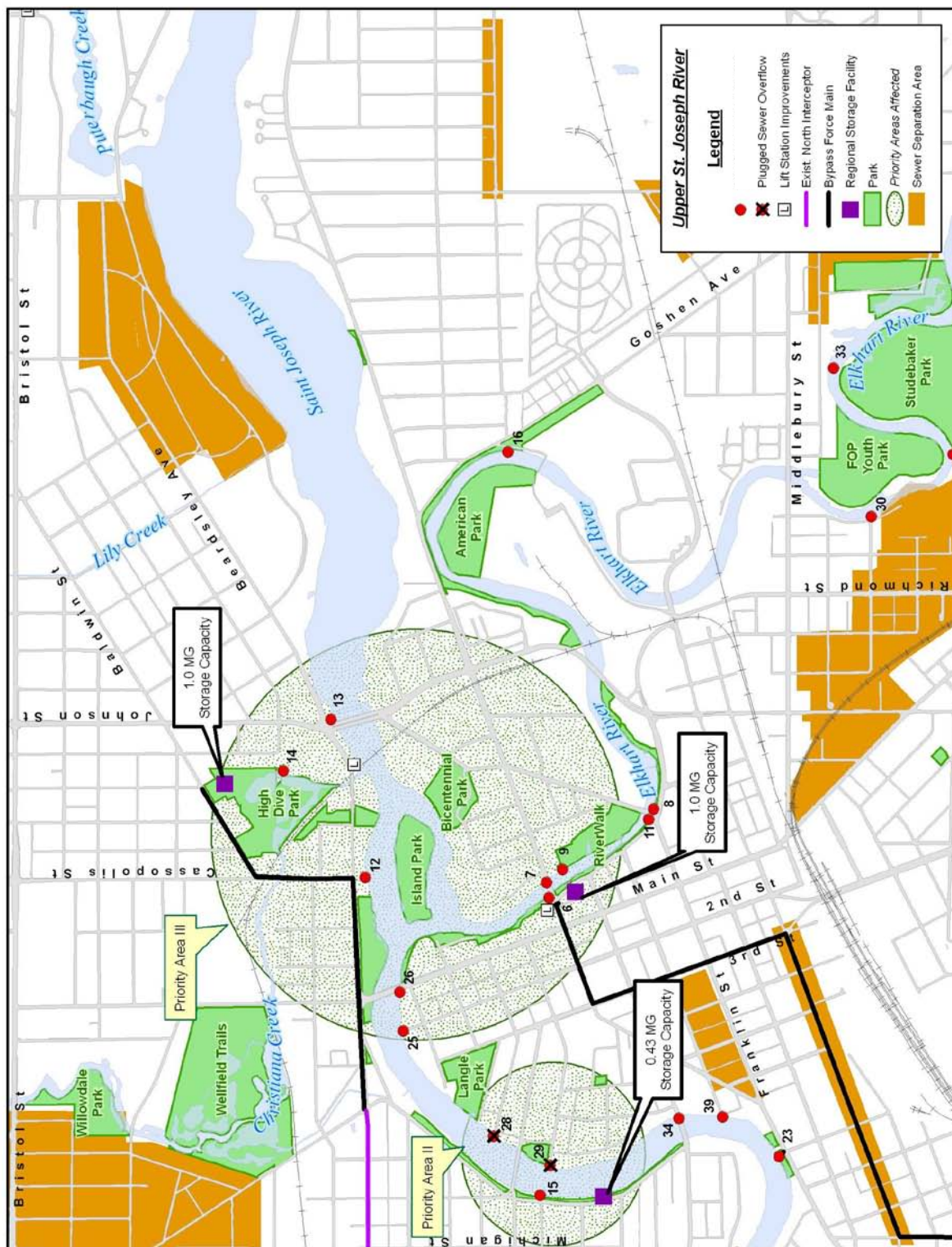
- Sewer separation in a portion of the basins that drain to CSO 13.
- Structural changes to the diversion chamber at CSO 25.

Overflows at CSO 26 will be reduced in this area as a result of separate CSO controls on the Elkhart River that will redirect flow away from the interceptor that services the Upper St. Joseph River. CSOs 12, 28, and 29 are located in the Upper St. Joseph River but already discharge very infrequently (zero times in a Typical Year) and do not require system changes as part of the selected plan.

CSOs 28 and 29 are expected to be eliminated. They first will be monitored during LTCP implementation to determine whether plugging the overflows would have any harmful effects during large storm events, as described in Appendix A, Section 2 – Post-Construction Monitoring Plan. Assuming that monitoring confirms the lack of adverse system effects, these outfalls will be permanently sealed.

The plan for the Upper St. Joseph River is illustrated in Figure 1-1. Some of the priority areas that will benefit from this control measure are also shown on the map.

Figure 1-1 Christiana Creek and Upper St. Joseph River Control Measures



### 1.1.3 Upper Elkhart River CSO Control Measure

The Upper Elkhart River includes the areas upstream of the Elkhart River Dam. It is the most upstream location in the City's combined sewer area. This control measure will control CSOs 4, 5, 16, 30, 31 and 33 and reduce overflows to all Priority Areas. This measure also will address two of the top eight overflow frequency locations (CSOs 4 and 30). This control measure includes the following elements:

- At CSO 31 near Lusher Avenue, Elkhart shall store overflows during wet weather using an 80,000-gallon regional storage tank and convey the captured flows to the wastewater treatment plant through existing sewers after the storm event;
- At CSOs 4, 30, and 33 near FOP Youth Park, Studebaker Park and Baker Park, the City will partially separate sewers in surrounding neighborhoods; and
- CSOs 5 and 16 already discharge less than 10 times in the Typical Year without basin changes.

The plan for the Upper Elkhart River is illustrated in Figure 1-2. Some of the priority areas that will benefit from this control measure are also shown on the map.

### 1.1.4 Lower Elkhart River CSO Control Measure

The Lower Elkhart River covers the areas downstream of Gracelawn Cemetery to the river's confluence with the St. Joseph River. This control measure will control CSOs 6, 7, 8, 9, and 11 and reduce overflows in Priority Areas I, II and III. CSO 6 is the sixth highest location for annual overflow volume, according to modeled estimates. This control measure includes the following elements:

- At CSOs 6 and 7 near Jackson Boulevard, the City will store and convey the overflows using a 1.02-million-gallon regional storage tank, conveyance upgrades and flow redirections. Upgrades to the system will allow the redirection of flow from the storage tank to the Oakland Avenue Control Measure when it is completed.
- CSOs 8, 9, and 11 do not require any system changes because they overflow infrequently under Typical Year conditions.

The plan for the Lower Elkhart River is illustrated in Figure 1-2. Some of the priority areas that will benefit from this control measure are also shown on the map.

### 1.1.5 Riverside Drive CSO Control Measure

The Riverside Drive CSO control measure will reduce overflows at CSO 15, located along Riverside Drive Park. CSO 15 is estimated to be the fourth highest volume location for sewage overflows in a Typical Year. These controls will reduce overflows in Priority Areas I and II. This control measure includes the following elements:

- A 430,000-gallon regional storage tank to store overflows during wet weather;
- Sewer separation of a portion of the basin near Willowdale Park and Wellfield Trails;
- Redirection of sanitary sewers from the AACOA Sewer Interceptor to the North Interceptor system, away from the combined sewer system.

The plan for Riverside Drive is illustrated in Figure 1-3, Lower St. Joseph River Control Measures. The priority areas that will benefit from this control measure are also shown on the map.



Figure 1-2 Elkhart River Control Measures

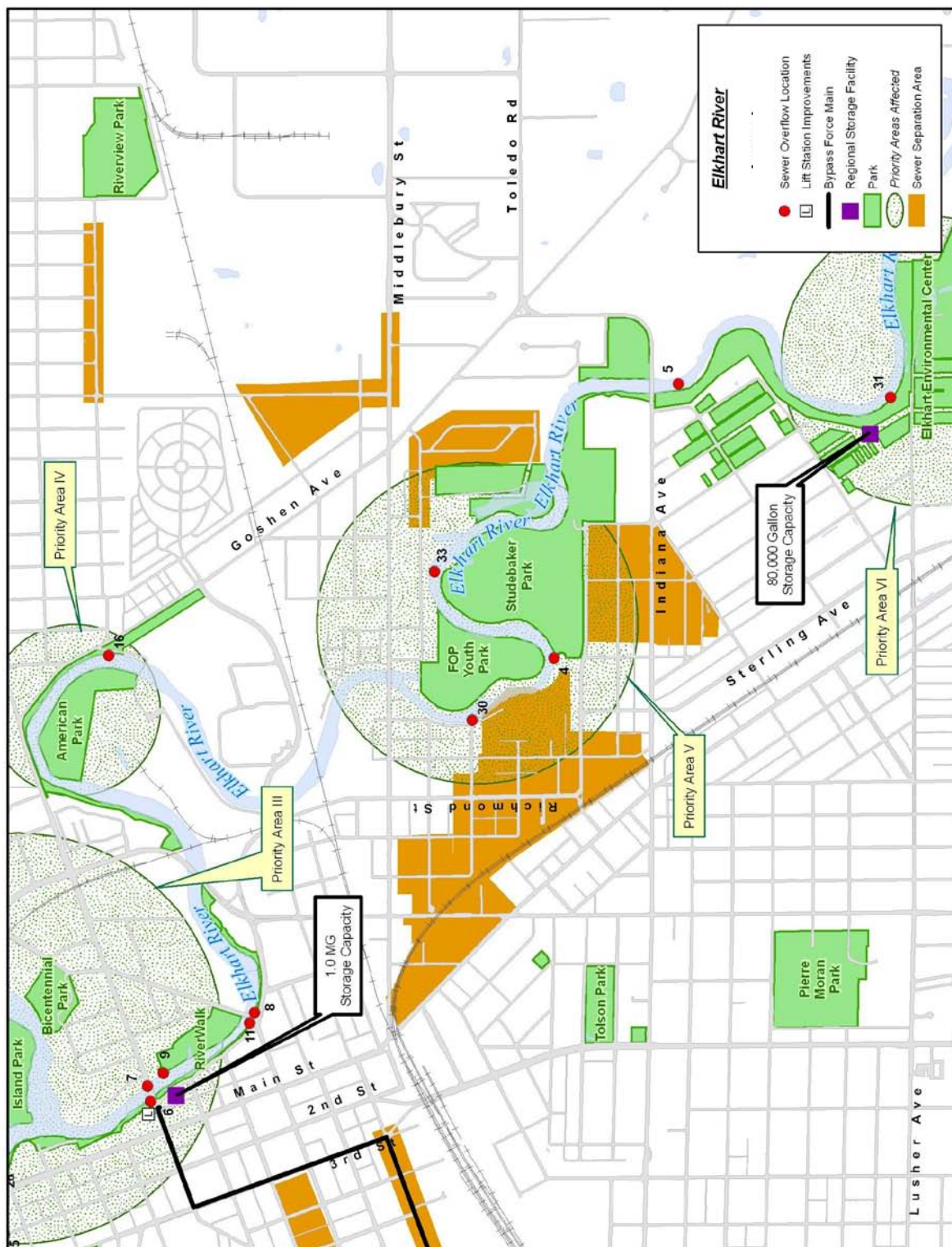
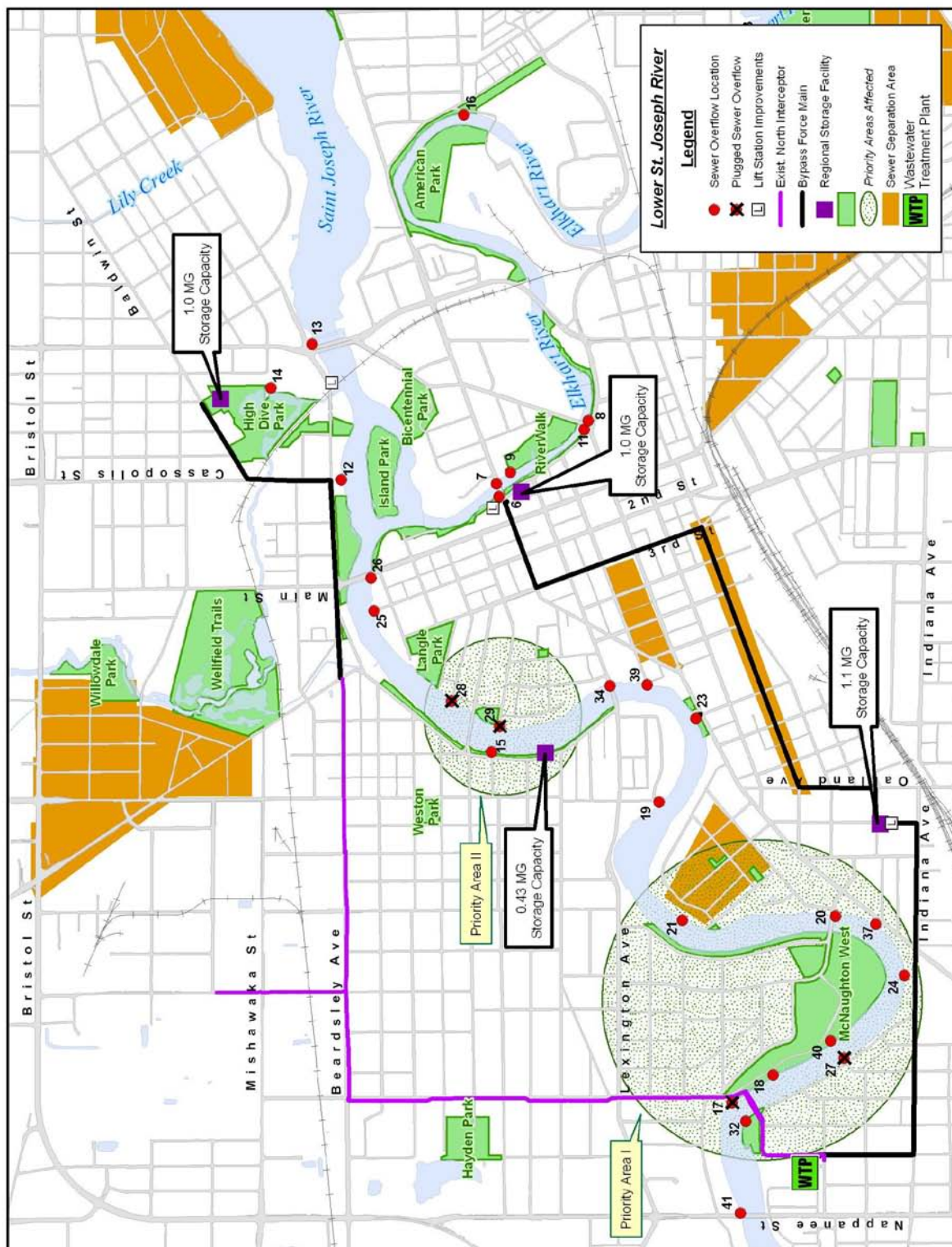


Figure 1-3 Lower St. Joseph River Control Measures



### 1.1.6 Oakland Avenue CSO Control Measure

The Oakland Avenue CSO control measure will reduce overflows at CSOs 24 and 37, the first and second highest overflow volume locations in the City's combined sewer system. These controls also will reduce overflows affecting Priority Area I. This control measure includes the following elements:

- A 1.1-million-gallon regional storage tank to store overflows during wet weather;
- Lift station, force main, conveyance upgrades and redirection of sewers;

When this control measure is completed, flows from CSOs 6 and 7 on the Elkhart River will be routed to the Oakland Avenue storage facility to redirect those flows away from a large portion of the combined sewer system serving the downtown area.

The elements of the Oakland Avenue control measure are illustrated in Figure 1-3, Lower St. Joseph River Control Measures. The priority area that will benefit from this control measure is also shown on the map.

### 1.1.7 Lower St. Joseph River CSO Control Measure

The Lower St. Joseph River stretches from the Lexington Avenue Bridge to the Nappanee Street Bridge. This control measure will reduce overflows at CSOs 17, 18, 19, 20, 21, 23, and 32 and affect Priority Area I. This control measure includes the following elements:

- Redirection of some flow from CSOs 17 & 18 to the North Interceptor system.
- Sewer separation in a portion of the sewer basins that feed into CSOs 21, 23 and 39.

Overflow frequencies and volume at CSO 19 will benefit from the redirection of Elkhart River overflows and storage and sewer separation projects related to CSO 15 on Riverside Drive. These projects are expected to reduce incoming flows at CSO 19 such that overflows occur infrequently or not at all under Typical Year conditions.

CSOs 20, 27, 32, 34, 40 and 41 do not require basin or system changes under the selected plan because they overflow infrequently under Typical Year conditions.

CSOs 17 and 27 are expected to be eliminated. They will be monitored during LTCP implementation to determine whether plugging the overflows would have any harmful effects during large storm events, as described in Appendix A, Section 2 – Post-Construction Monitoring Plan.

The elements of the Lower St. Joseph River control measure are illustrated in Figure 7-3. The priority area that will benefit from this control measure is also shown on the map.

### 1.1.8 Wastewater Treatment Plant Upgrades Control Measure

The Elkhart Wastewater Treatment Plant (WWTP) currently has a peak capacity of approximately 44 MGD. In combination, a number of plant components limit the current WWTP capacity. These components are preliminary treatment (screening), hydraulic components (various channels and pipes), step-feed aeration capabilities, and effluent disinfection.

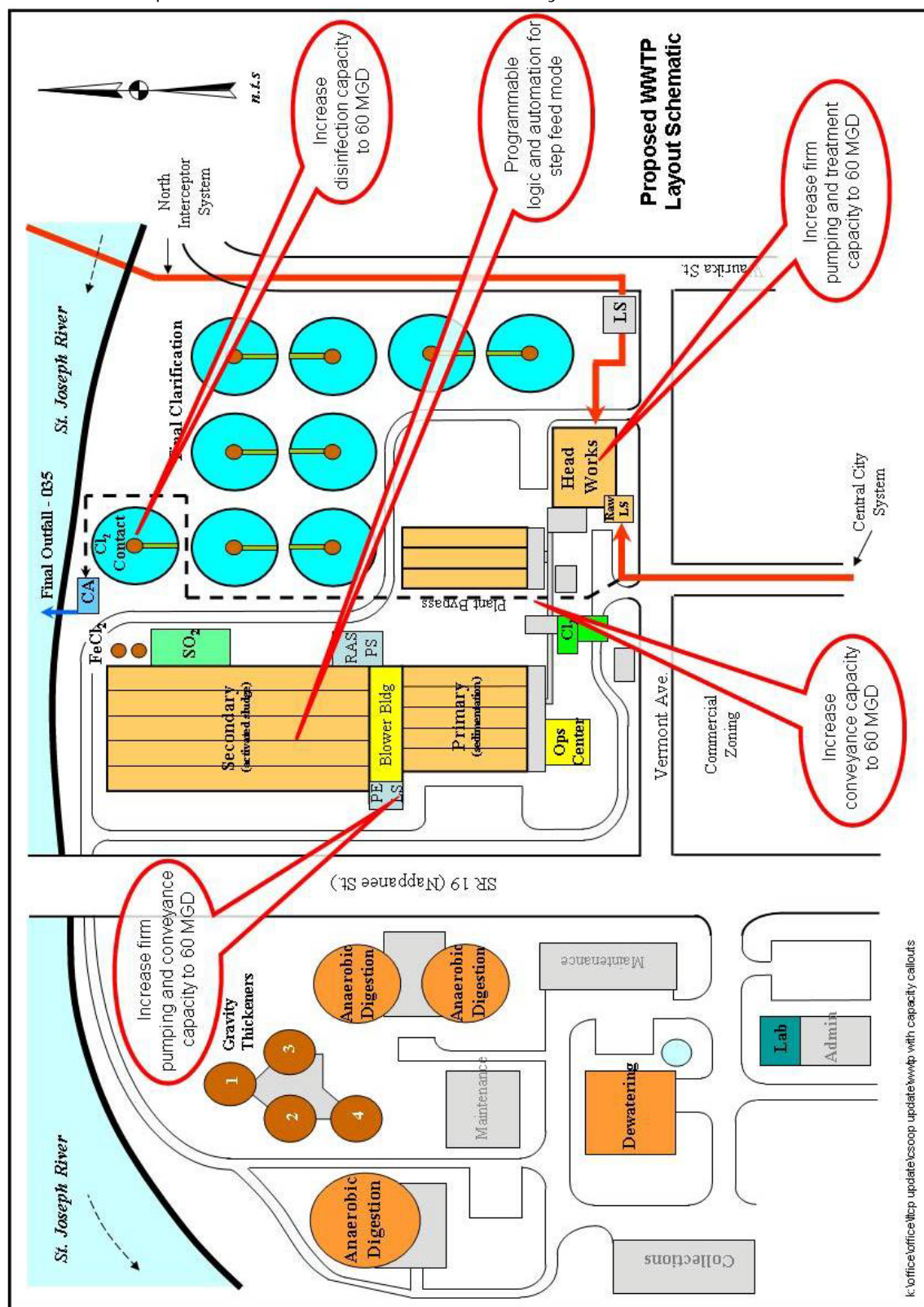
The Oakland Avenue Control Measure in the selected plan will add a force main from Oakland Avenue to capture and reduce overflows from CSOs 24 and 37. The additional force main will



require WWTP system improvements to provide a peak sustained flow rate of up to 60 MGD through full secondary treatment. This is the peak sustained flow rate that is expected to be delivered to the WWTP, based upon the SWMM model at the selected LTCP level of control. The WWTP projects will include modifications to the influent pumping, preliminary treatment, and primary effluent pumping systems. Additionally, improvements to the primary influent channels, primary effluent channels, aeration influent piping and valves, and the aeration influent channels and step-feed control gate automation and controls are needed to relieve hydraulic bottlenecks to allow the plant to process a peak sustained flow rate of 60 MGD through full secondary treatment. Finally, the proposed WWTP improvements will include construction of a disinfection system to accommodate a flow rate up to 60 MGD. We anticipate no plant bypasses in a Typical Year, assuming normal plant operations. Figure 1-4 illustrates the planned improvements to the WWTP in red.



Figure 1-4 Schematic of Proposed Wastewater Treatment Plant Layout



## 1.2 LTCP Benefits

This section describes how the selected plan is expected to benefit the St. Joseph River and Elkhart River. The City used the river model to predict environmental benefits and the collection system model to predict overflow volume and frequency under the selected plan.

### 1.2.1 Annual Average Rainfall Statistics

Predictions in Section 7.5 are based upon average annual rainfall statistics, using the historical record from 1960 through 2000 at the airport in South Bend, Indiana. Average annual statistics were used to select a Typical Year (1992) under the WISE analysis, part of the cooperative effort among the cities of South Bend, Mishawaka, and Elkhart. Table 7-2 below displays the average annual rainfall and St. Joseph River stream flow averages based upon the WISE Typical Year analysis:

Table 1-2 Annual Average Rainfall and Stream Flow Statistics

<b>Ambient Factor</b>	<b>Criterion</b>	<b>Historical Annual Average<sup>1</sup></b>	<b>Historical Summer<sup>1,2</sup> Average</b>
Rainfall	Number of Storms > 0.11"	<b>70</b>	<b>30</b>
	Annual Volume (inches)	<b>38.3</b>	<b>18.3</b>
	5 <sup>th</sup> Largest Event (inches)	<b>1.41</b>	<b>1.07</b>
	Number of back-to-back Storms <sup>3</sup>	<b>2.5</b>	<b>1.8</b>
Stream Flow	25 <sup>th</sup> Percentile (cfs)	<b>1,900</b>	<b>1,650</b>
	50 <sup>th</sup> Percentile (cfs)	<b>2,890</b>	<b>2,350</b>
	75 <sup>th</sup> Percentile (cfs)	<b>4,220</b>	<b>3,500</b>

Notes:

<sup>1</sup> The historical averages are based on 41 years of data recorded from 1960 through 2000.

<sup>2</sup> Summer is defined as May 1 through September 30.

<sup>3</sup> "Back-to-back" storms are defined as storms occurring within 24 hours of each other and each storm having at least 0.5" of total rainfall.

Actual performance following LTCP implementation will be compared to results that would be expected during a Typical Year.

### 1.2.2 CSO Volume and Overflow Reduction

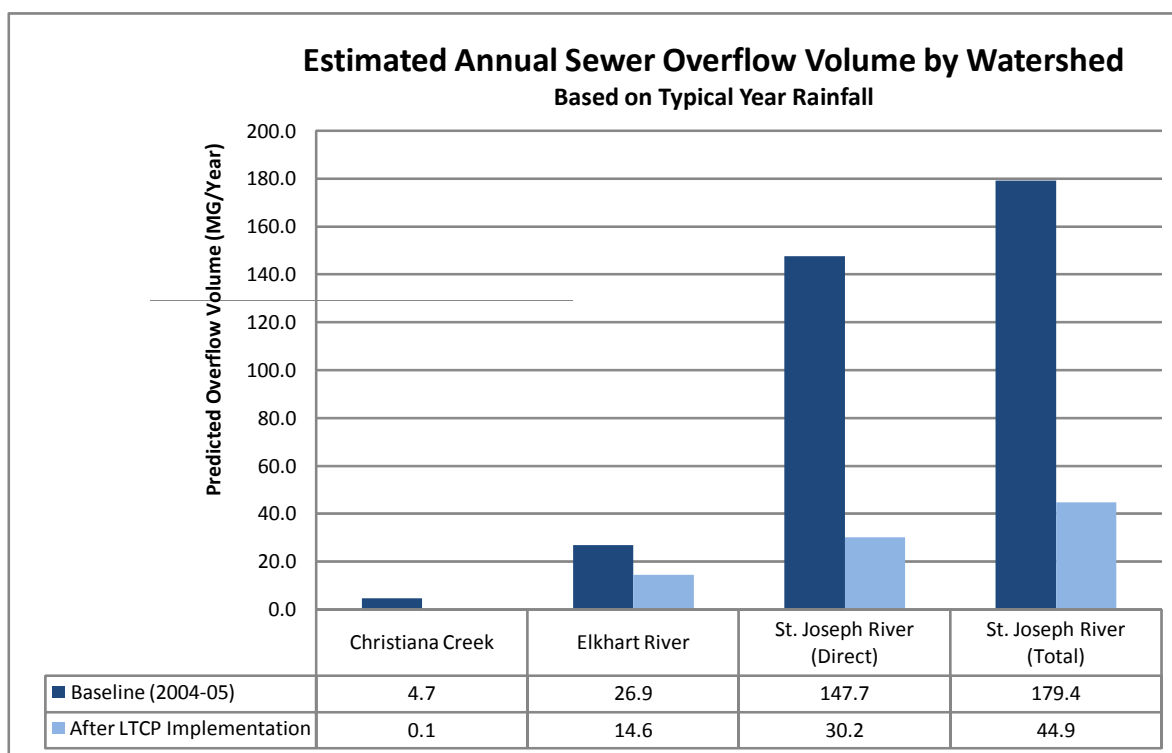
Elkhart's LTCP will significantly reduce remaining combined sewer overflow volume and frequency to CSO-impacted waterways. While the following description estimates overflow volume and percent capture under the selected plan, Elkhart's performance measure for compliance with LTCP requirements is a system-wide overflow frequency of no more than nine Overflow Events during a Typical Year. Performance Criteria and Design Criteria are further described in Section 1.3 and Appendix A, Section 2 – Post-Construction Monitoring Plan.

Estimated annual overflow volumes and frequency for baseline and future system conditions were generated using Elkhart's planning-level XP-SWMM model of the existing collection system. These estimates assume the occurrence of average rainfall for a Typical Year rainfall applied uniformly throughout the Elkhart service area. With Elkhart's selected control measures in place, model simulations predict a maximum of nine Overflow Events occurring during a Typical Year.

Figure 1-5 illustrates estimated annual overflow volume during a Typical Year, by watershed. The graph compares baseline conditions in 2004-05 to expected conditions after LTCP implementation. The 2004-05 “baseline” year already reflects significant CSO control efforts to that point. The “St. Joseph River (Direct)” statistics represent outfalls that overflow directly into the St. Joseph River. The “St. Joseph River (Total)” statistics represent volume from all Elkhart overflow locations, since the Elkhart and Christiana Creek overflows eventually impact the St. Joseph River.

Notably, average annual overflow volume is expected to be reduced by approximately 75 percent when compared to 2004-05 baseline conditions. When combined with progress to date, this represents approximately 96 percent capture and treatment of wet-weather flows into the sewer system in a Typical Year. Elkhart calculates the plan’s percent capture as the volume captured and treated during wet-weather conditions divided by the total volume of flow in the combined sewer system during wet-weather conditions. The total volume of flow is the sum of the volume captured and treated and the overflow volume. When this calculation is applied, the selected plan should achieve approximately 96 percent capture system-wide.

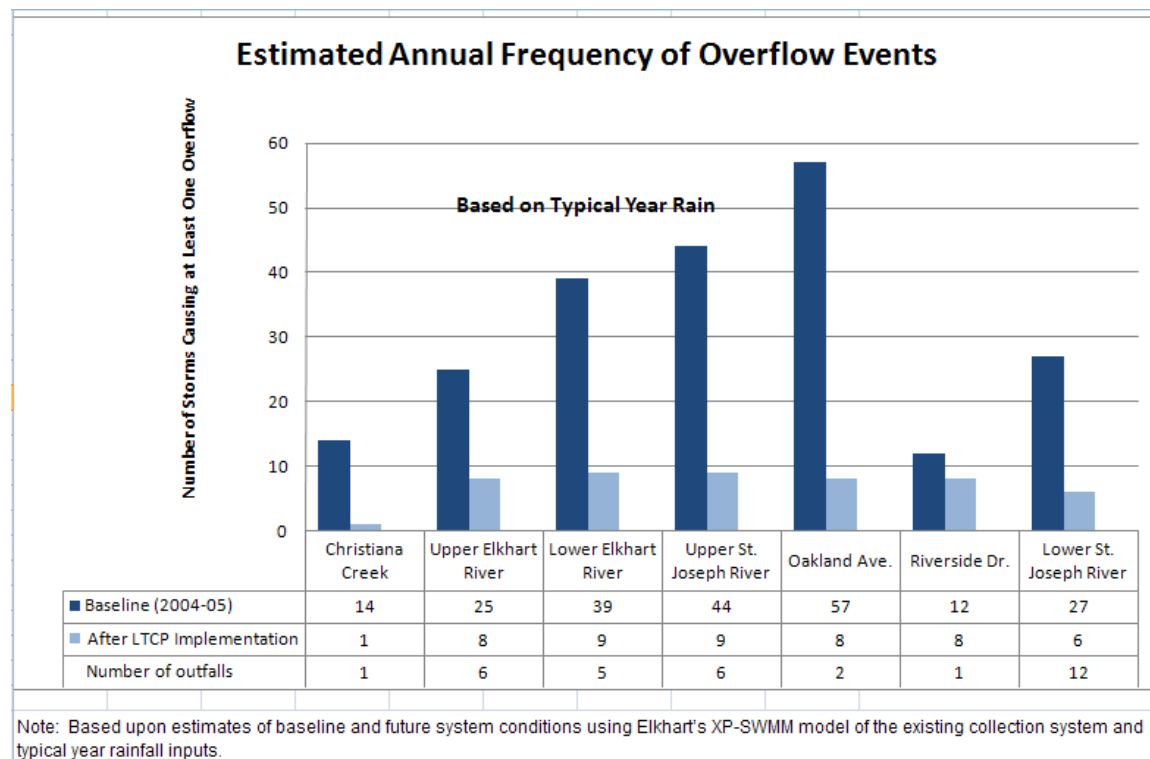
Figure 1-5 Estimated Annual Sewer Overflow Volume by Watershed



Note: Based upon estimates of baseline and future system conditions using Elkhart's XP-SWMM model of the existing collection system and typical year rainfall inputs.

Figure 1-6 estimates the annual frequency of Overflow Events during a Typical Year by geographic area. Nevertheless, Elkhart commits to eliminating all but 9 Overflow Events during a Typical Year.

Figure 1-6 Estimated Annual Frequency of Overflow Events



### 1.3 Implementation Schedule

This section describes how the City developed its implementation schedule.

#### 1.3.1 Prioritization and Scheduling Criteria

The City used the following criteria to develop the LTCP implementation schedule:

**Sensitive and Priority Areas:** Projects to reduce overflows to sensitive or priority areas were given a higher priority in the schedule. Reducing overflows to Christiana Creek were given the highest priority and placed first in the implementation schedule under this criterion. Projects in the Elkhart River Watershed also were given priority because they impact multiple parks and priority areas.

**Financial Impact on Ratepayers:** The City sought to develop a schedule that would phase in the project over time in an affordable manner to local ratepayers.

**Logical Construction Sequencing:** The city also reviewed all projects from a logical engineering and construction perspective to determine the relationship between projects. Interdependent projects were sequenced in order of their logical completion so that completed projects would have maximum utility at the earliest possible stage.

#### 1.3.2 Implementation Schedule

Elkhart shall complete implementing the LTCP on or before December 31, 2029 unless a different schedule is approved by the United States and Indiana or ordered by the Court for the Remaining LTCP Projects pursuant to the procedures in Section XIX Schedule Reconsideration Based on

Financial Circumstances of the Decree. Table 1-3 lists the CSO Control Measures chronologically, and also includes Design Criteria, Performance Criteria, and Critical Milestone dates for each project or group of projects.

The LTCP consists of the following commitments by the City of Elkhart:

- Implementing the CSO control measures listed in Table 1-3 according to the Design Criteria and Performance Criteria specified; and
- Meeting the schedule for Critical Milestones established in Table 1-3.

Following implementation of the LTCP, one or more CSO outfalls are expected to discharge during large storm events during up to 9 separate Overflow Events during a Typical Year. After Elkhart has demonstrated compliance with all Performance Criteria, to the extent that post-construction monitoring shows that the residual overflows interfere with designated uses, Elkhart may conduct a use attainability analysis to determine whether the designated uses are attainable.



Table 1-3 CSO Control Measures, Design Criteria, Performance Criteria, and Critical Milestones

CSO Control Measure	CSO Number	Priority Areas Affected	CSO Control Measure Elements	Description	Design Criteria <sup>1</sup>	Performance Criteria	Critical Milestones
<b>Christiana Creek CSO Control</b>							
1	14	Areas III, II, and I	High Dive Park - 1.0 MG Facility for Storage & Pumping and Redirection of CSO 14 Basin Flow from Northeast Elkhart to the North Interceptor System	Construction of a 1 MG off-line storage tank to reduce overflows at CSO 14 and construct a LS to redirect flow to the North Interceptor System	Provide storage capacity of 1 MG and lift station designed per Ten State Standards	When incorporated with the rest of the Christiana Creek Watershed, achieve no more than 9 Overflow Events on a systemwide basis	Design Date - Nov 15, 2010 Bid Date - Nov 15, 2011 Date of Full Operation - Nov 15, 2014
<b>Upper Elkhart River CSO Control</b>							
2	4, 30, 31 & 33	All Areas. Two of the top 8 overflow frequency locations	EEC - 80,000 gal. Storage & Pump at CSO 31 and various levels of separations at CSO's 4, 30 & 33	Construction of a 80,000 gallon off-line storage tank to reduce overflows at CSO 31 and separation and rehabilitation of sewers to reduce stormwater flow and minimize CSO's 4, 30 & 33	Provide storage capacity of 80,000 gal. and sanitary and storm sewers designed per Ten State Standards	When incorporated with the rest of the system upgrades, no more than 9 Overflow Events on a systemwide basis	Design Date - Nov 15, 2013 Bid Date - Nov 15, 2014 Date of Full Operation - Nov 15, 2018
<b>WWTP Plant Upgrades</b>							
3	WWTP		WWTP system improvements provide a peak capacity of 60 MGD through full secondary treatment and disinfection	Modifications to the influent pumping, preliminary treatment, and primary effluent pumping systems with modifications to flow channels and conduits to relieve hydraulic bottlenecks as well as programmable logic for automated step feed	System Improvements designed per Ten State Standards	Provide a peak capacity of 60 MGD through full secondary treatment and disinfection	Design Date - Nov 15, 2015 Bid Date - Nov 15, 2017 Date of Full Operation - Nov 15, 2023
<b>Lower Elkhart River CSO Control</b>							
4	6&7	Areas III, II, and I. Sixth highest overflow volume location (CSO 6)	Jackson Street - 1.0 MG Storage and Pumping facility and redirection of system flows to Oakland Avenue Control Facility <sup>3</sup>	Construction of a 1 MG off-line storage tank to reduce overflows at CSOs 6 & 7 with upgrades to the system to allow the redirection of flow to Oakland Avenue Control Measure when it is completed. <sup>3</sup>	Provide storage capacity of 1 MG with lift station and system improvements designed per Ten State Standards	When incorporated with the rest of the system upgrades, achieve no more than 9 Overflow Events on a systemwide basis	Design Date - Nov 15, 2016 Bid Date - Nov 15, 2018 Date of Full Operation - Nov 15, 2021
<b>Oakland Avenue Control</b>							
5	24 & 37	Area I. 1st and 2nd highest overflow volume locations	CSO 24 - LS 1.1 MG Storage and Pump Force Main from CSO 24 LS to WWTP	Construction of a 1.1 MG off-line storage and pump tank with system additions to allow the redirection of flow to CSO 24 & 37 LS and then to the WWTP to reduce overflows at CSOs 24 & 37	Provide storage capacity of 1.1 MG with lift station and system improvements designed per Ten State Standards	When incorporated with the rest of the system upgrades, no more than 9 Overflow Events on a systemwide basis	Design Date - Nov 15, 2021 Bid Date - Nov 15, 2023 Date of Full Operation - Nov 15, 2028
<b>Upper St Joseph River CSO Control</b>							
6	13, 25, 29 & 39	Areas III, II, and I	Basin Separations, Lift Station Improvements, system improvements, and CSO eliminations	Separation, flow redirection, and rehabilitation of sewers to reduce stormwater flow and minimize or eliminate CSOs	System modifications designed per Ten State Standards	When incorporated with the rest of the system upgrades, no more than 9 Overflow Events on a systemwide basis	Design Date - Nov 15, 2022 Bid Date - Nov 15, 2023 Date of Full Operation - Nov 15, 2026
<b>Lower St Joseph River CSO Control</b>							
7	17, 18, 21 & 23	Area I	Basin Separations, Lift Station Improvements, system improvements, CSO eliminations and system redirections	Separation, flow redirection and rehabilitation of sewers to reduce stormwater flow and minimize or eliminate CSOs	System modifications designed per Ten State Standards	When incorporated with the rest of the system upgrades, no more than 9 Overflow Events on a systemwide basis	Design Date - Nov 15, 2023 Bid Date - Nov 15, 2024 Date of Full Operation - Dec 31, 2029
<b>Riverside Drive Control</b>							
8	15	Areas I and II. 4th highest overflow volume location	Riverside Dr. - 0.43 MG Storage & Pump with sewer separations and system redirection	Construction of a 0.43 MG off-line storage tank with Northwest Elkhart sewer system redirection and partial basin separation to reduce overflows at CSO 15	Provide storage capacity of 0.43 MG and system improvements designed per Ten State Standards	When incorporated with the other work in CSO 15 basin and downstream improvements, achieve no more than 9 Overflow Events on a systemwide basis	Design Date - Nov 15, 2024 Bid Date - Nov 15, 2025 Date of Full Operation - Dec 31, 2029

<sup>1</sup> Elkhart shall design each CSO Control Measure in accordance with standard engineering practices to ensure that Elkhart will achieve corresponding facility-specific or system-wide Performance Criteria.

The following definitions were used in developing Table 1-3:

“Bid Date” shall mean the date by which: (1) Elkhart has appropriately allocated funds for a specific CSO Control Measure (or portion thereof); (2) the bid for the specific CSO Measure has been accepted and awarded by Elkhart’s Board of Public Works for the construction of the CSO Control Measure; and (3) Elkhart has issued a notice to proceed to the contractor who will perform the work. Several CSO Control Measures in Table 1-3 of the Appendix consist of separate components. For those CSO Control Measures, Completion of Bidding Process shall be achieved when the first project in the construction sequence has met the above definition.

“Critical Milestone” shall mean significant dates by which progress in implementing the LTCP will be tracked. For each major CSO Control Measure shown in Table 1-3 of the Appendix, the Critical Milestones tracked will be Design Date, Bid Date, and Date of Full Operation.

“CSO Control Measures” shall mean structural measures designed to eliminate, reduce, or mitigate the volume, frequency or pollutant levels in CSOs.

“Date of Full Operation” shall mean the completion of construction and installation such that the relevant system has been placed in full operation, and is expected to both function and perform as designed, including all control systems and instrumentation necessary for normal operations and all residual handling systems. Elkhart shall verify the Date of Full Operations in a memorandum to Elkhart’s Board of Public Works. Several CSO Control Measures in Table 1-3 of the Appendix consist of separate components. For those CSO Control Measures, the Date of Full Operations shall be the date that the last component is completed. “Design Criteria” shall mean and specify how the selected CSO control measures shall be designed to achieve the required level of control. All selected LTCP projects will be designed in accordance with standard engineering practices to ensure that corresponding facility-specific and system-wide Performance Criteria will be achieved.

“Design Criteria” shall mean and specify how the selected CSO Control Measures shall be designed to achieve the required level of control. All selected LTCP projects shall be designed in accordance with standard engineering practices to ensure that corresponding facility-specific and system-wide Performance Criteria will be achieved.

“Design Date” shall mean the date on which the design has officially begun. The design process may include preliminary sizing, modeling, final sizing, and preparation of final plans and specifications. Elkhart shall verify the Design Date by a memorandum to Elkhart’s Board of Public Works that design has begun. Several CSO Control Measures in Table 1-3 of the Appendix consist of separate components. For those CSO Control Measures, the Design Date shall be achieved when the first project in the construction sequence has met the above definition.

“Performance Criteria” shall mean and include any of the following: completing the CSO Control Measures so that they operate as designed; not exceeding the the Typical Year Overflow Event frequency described in Table 1-3 of Appendix A; conveying the design flow rates; and meeting any and all applicable LTCP requirements and permit requirements.

## 1.4 Summary

The CSO Control Measures in Elkhart’s Long Term Control Plan are designed to result in no more than nine Overflow Events during a Typical Year. The CSO Control Measures in Elkhart’s LTCP are designed to result in zero overflow events at many outfalls during a Typical Year and no more than 9 overflow events at one or more of the remaining outfalls.

Elkhart's LTCP features a combination of the following CSO Control Measures:

- Continuing Elkhart's ongoing program of partial or complete sewer separation in several CSO Basins;
- Redirecting Elkhart's sewer system to send some flows to the wastewater treatment plant on a route that moves the flows out of the combined sewer area;
- Regional storage tanks to capture and store sewage overflows during wet weather;
- Sewer system conveyance improvements; and
- Wastewater treatment plant improvements.

Elkhart shall complete implementing the LTCP on or before December 31, 2029 unless a different schedule is approved by the United States and Indiana or ordered by the Court for the Remaining LTCP Projects pursuant to the procedures in Section XIX Schedule Reconsideration Based on Financial Circumstances of the Decree.

Elkhart's LTCP will significantly reduce combined sewer overflow volume and frequency to CSO-impacted waterways.

The City considered sensitive and priority areas and logical construction sequencing to develop the implementation schedule. Reducing overflows to Christiana Creek was given the highest priority and placed first in the implementation schedule. Projects in the Elkhart River watershed also were given high priority because those projects will impact multiple City parks and priority areas.



## Appendix A: Section 2:



## Post-Construction Monitoring Plan

### 2.1 Introduction

This section describes Elkhart's plans to monitor the implementation and effectiveness of the long-term control plan in meeting the City's goals and Clean Water Act requirements. When implemented, the City's CSO controls are expected to improve water quality in Christiana Creek, the Elkhart River and the St. Joseph River. The City will track progress by individual watersheds where controls are implemented using the monitoring program described below.

The post-construction monitoring program includes the following elements:

- Actions to document that Elkhart has built the CSO control measures required under the LTCP and that they are meeting the Design Criteria;
- Actions to determine whether the control measures have achieved the Performance Criteria that CSO controls must achieve nine or fewer CSO events on a system-wide basis during a Typical Year;
- Actions to monitor the benefits of the CSO control measures, such as in-stream water quality improvements and reductions in CSO volume, frequency and duration when compared to baseline conditions; and,
- Progress reporting to U.S. EPA, IDEM, the Elkhart City Council, Elkhart Board of Public Works and the general public.

After Elkhart has demonstrated compliance with all Performance Criteria, to the extent that post-construction monitoring shows that the residual overflows interfere with designated uses, Elkhart may conduct a use attainability analysis to determine whether the designated uses are attainable.

### 2.2 General Requirements

U.S. EPA and IDEM require CSO communities to monitor their progress in reducing CSOs during and after LTCP implementation. "Monitoring during LTCP implementation should include data collection to measure the overall effects of the program on water quality and to determine the effectiveness of CSO controls. ... A monitoring plan to assess water quality conditions during and after program implementation will allow evaluation of the improvements through comparison to baseline conditions."<sup>2</sup>

Elkhart shall use existing monitoring stations to collect long-term data for comparisons. Elkhart shall describe monitoring plan components, such as a map of monitoring stations, a record of the

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<sup>2</sup> Combined Sewer Overflows: Guidance for Long Term Control Plans, U.S. Environmental Protection Agency, September 1995, Section 4.6 Post-Construction Compliance Monitoring, page 4-15.

frequency of sampling at each station, a parameter list, and a plan for maintaining quality assurance and quality control.

## 2.3 Monitoring, Data Collection and Analysis

### 2.3.1 Monitoring Plans

#### 2.3.1.1 In-stream Monitoring

Elkhart's monitoring strategy described in this plan is focused primarily on evaluating CSO control performance and associated benefits on in-stream water quality for *E. coli*.

Elkhart's post-construction monitoring program will utilize the in-stream monitoring locations and parameters identified in Table 2-1 below. All locations will be monitored as indicated with the exception of when the river is frozen at select locations during winter months. The parameter list includes constituents that will allow the City to evaluate attainment of recreational (*E. coli*) and aquatic life (dissolved oxygen, temperature and pH) uses. As noted in Table 2-1, Elkhart also will document observations of floatables, odor, color, and extent of algae to describe river conditions related to narrative water quality standard criteria.

Table 2-1 Stream Monitoring Locations

Site ID	Location	Receiving Stream	Rationale	Frequency	Parameters <sup>2</sup>
1	Christiana Creek - Footbridge Upstream of Confluence with St. Joe River	Christiana Creek	Characterize Christiana Creek basin; Includes loads from all watershed sources, including 1 City CSO	- 1 dry event / mo. - 3 wet events following $\geq$ 0.8" rain event <sup>1</sup>	DO, pH, Temp, Wthr, Wa, E. Coli
2	6-Span Bridge (County Road 17)	St. Joe River	Characterize Upstream St. Joe River basin; Includes loads in St. Joseph River basin from sources upstream of the City	- 1 dry event / mo. - 3 wet events following $\geq$ 0.8" rain event <sup>1</sup>	DO, pH, Temp, Wthr, Wa, E. Coli
3	Lexington Avenue	St. Joe River	Upper St. Joe River basin; Include loads from Elkhart River, 2 City CSOs, and four tributaries (Christiana, Pine, Puterbaugh, Osolo)	- 1 dry event / mo. - 3 wet events following $\geq$ 0.8" rain event <sup>1</sup>	DO, pH, Temp, Wthr, Wa, E. Coli
4	Ash Rd	St. Joe River	Characterize Lower St. Joe River basin; Includes loads from 5 City CSOs, WWTP, two tributaries (Baugo and Cobus)	- 1 dry event / mo. - 3 wet events following $\geq$ 0.8" rain event <sup>1</sup>	DO, pH, Temp, Wthr, Wa, E. Coli
5	Elkhart River - County Road 18	Elkhart River	Characterize Upstream Elkhart River basin; Includes loads from sources upstream of the City, including Rock Run Creek	- 1 dry event / mo. - 3 wet events following $\geq$ 0.8" rain event <sup>1</sup>	DO, pH, Temp, Wthr, Wa, E. Coli
6	Elkhart River - Footbridge Upstream of Confluence with St. Joe River	Elkhart River	Characterize Elkhart River basin; Includes loads from 7 City CSOs, Yellow Creek	- 1 dry event / mo. - 3 wet events following $\geq$ 0.8" rain event <sup>1</sup>	DO, pH, Temp, Wthr, Wa, E. Coli

**LEGEND:**

<sup>1</sup> The City will collect data for a minimum of 3 wet weather events in a recreational season and with a goal of monitoring 1 wet event/month

<sup>2</sup> The City will note observations regarding floatables, color, odor and extent of algae at each sampling location

*Analytical Parameter Abbreviations:*

DO – dissolved oxygen, mg/L

pH – pH, s.u.

Temp – water temperature, deg C

Wthr – weather (1)

Wa – water appearance (2)

E. Coli – E. Coli, cfu

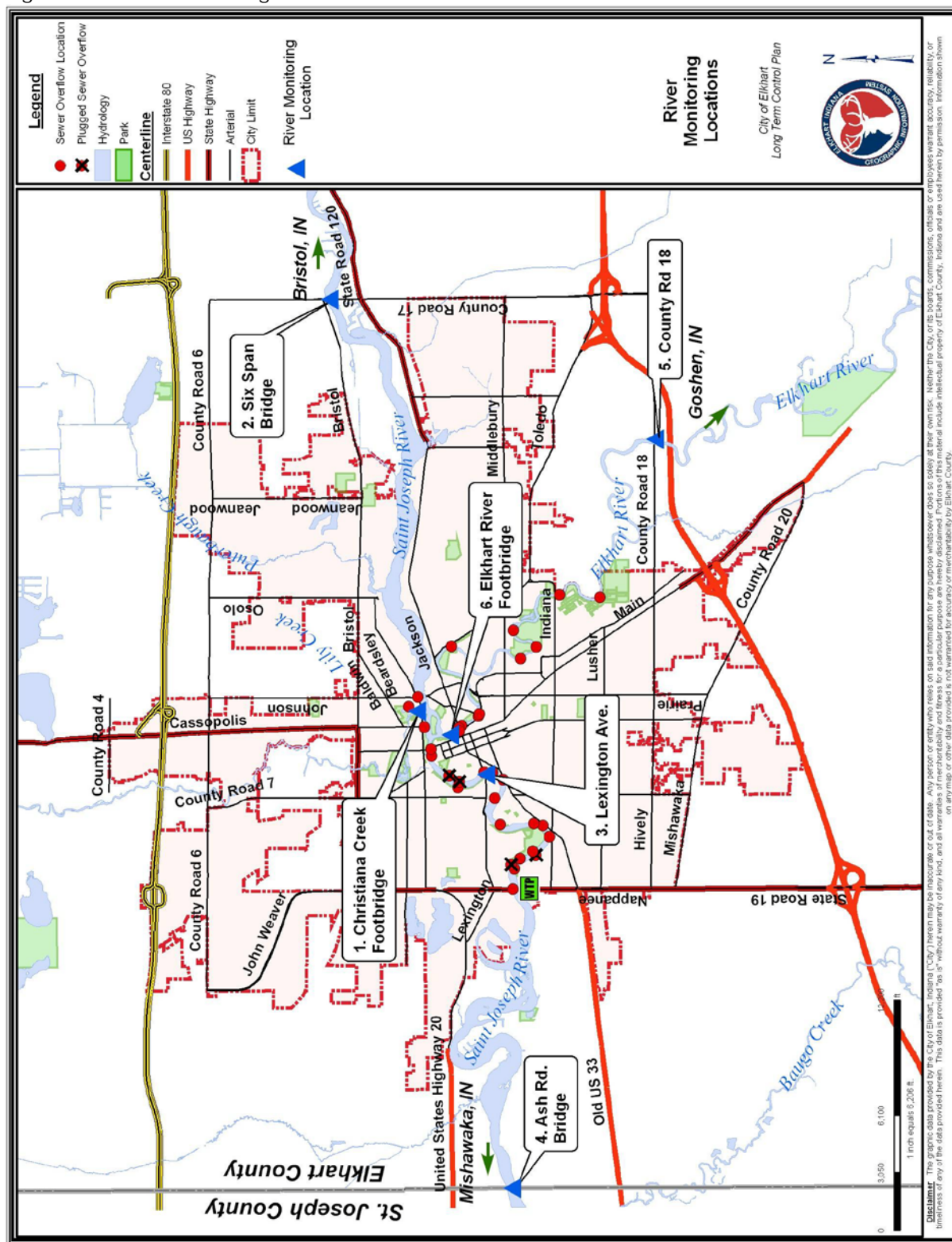
**Additional notes to document weather and water conditions:**

1 – Weather conditions: 1 = clear / sunny, 2 = partly sunny, 3 = cloudy, 4 = lt rain, 5 = rain, 6 = lt snow, 7 = snow, 8 – windy

2 – Water appearance: 1 = clear, 2 = cloudy, 3 = murky, 4 = muddy

Figure 8-1 illustrates the stream monitoring locations described above.

Figure 2-1 River Monitoring Locations



### 2.3.1.2 CSO Outfall Monitoring

Elkhart shall continue to monitor active CSO outfalls using its CSO activation monitoring system. The monitoring system, which currently uses a combination of daily site visits and continuous monitors, will be modified during the first five years of the LTCP implementation plan to include continuous monitoring of depth of flow and activations at all active CSOs while limiting site visits to twice a month for maintenance and calibration. CSO activation monitoring system changes will be updated in the CSO Operation Plan as they occur.

### 2.3.1.3 Precipitation Monitoring

Elkhart has three active rain gauge monitoring stations across the service area. Elkhart shall continue to monitor rainfall at those stations. Elkhart shall monitor rainfall during each storm event during the post-construction monitoring period to record each storm event.

## 2.3.2 Data Management and Analysis

### 2.3.2.1 Collection System Data Analysis

Elkhart shall use sound engineering judgment and best industry practices to use the collection system model to determine whether the City has achieved compliance with the Performance Criteria set forth in Table 1-3. Elkhart shall update and calibrate the model by performing the following steps:

1. Collect flow monitoring, rainfall, and CSO activation data sufficient to re-calibrate the collection system and water quality models during a 12-month post-construction monitoring period after Achievement of Full Operations of all CSO Control Measures in the LTCP.
2. Perform quality assurance and quality control of the data collected in Step 1, as described in the City's Quality Assurance Project Plan (QAPP)<sup>3</sup>.
3. Update the collection system model to incorporate all completed projects and any other system improvements completed since the LTCP calibration effort. Utilize the updated collection system model and the rainfall data collected during the monitoring period to run a continuous simulation of CSO discharges for the 12-month post-construction monitoring period.
4. Compare CSO activation frequency and annual average system-wide CSO volume in the continuous simulation outputs to the CSO monitoring data for the 12-month post-construction monitoring period to determine whether re-calibration of the collection system model is needed. The model-predicted activations shall be no more than one activation less than monitored activations for CSOs with more than five monitored activations during a Typical Year. (That is, to be considered calibrated, for an outfall that is predicted to have six overflows during a Typical Year and which experienced 8 overflows during post-construction monitoring, the model must predict 7 or more overflows for that outfall for that same post-construction monitoring period). Additionally, no individual outfall shall have more than nine model-predicted activations or monitored activations during a Typical Year. Moreover, for CSO numbers 6, 25, and 37, the model-predicted activations shall be no less than the number of monitored activations during a Typical Year. Finally, the model also shall predict the system-wide annual average overflow volume within +/- 20 percent. Model re-calibration will not be needed if the model achieves the aforementioned criteria. . If these criteria

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<sup>3</sup> St. Joseph River Watershed Initiative for a Safer Environment (WISE) Quality Assurance Project Plan (205(j) Grant A305-2-01-399-0), October 25, 2002, and revised on April 29, 2003.

are not met, Elkhart shall recalibrate the model in accordance with Steps 5-6. At the conclusion of Step 4, Elkhart shall prepare an Initial Model Validation Report and present it to EPA and IDEM for authorization to proceed to the next step.

5. If re-calibration is needed, Elkhart shall select two or more appropriate rainfall events from the 12-month post-construction monitoring period for model recalibration.

6. After Elkhart re-calibrates the model using sound engineering judgment in accordance with standard industry practices, Elkhart shall run another continuous simulation for the entire monitoring period to verify the re-calibrated model. Thereafter, Elkhart shall compare the continuous simulation outputs to the CSO monitoring data as described in Step 4, to determine whether additional re-calibration is needed. If so, Elkhart shall conduct re-calibration in accordance with Steps 5-6 until the model achieves the criteria described in Step 4, above.

If EPA and IDEM agree that Elkhart has adequately calibrated and validated the model, based on re-calibration efforts, Elkhart shall prepare a Model Re-Calibration Report documenting the re-calibration and validation. After receiving authorization from EPA and IDEM, Elkhart then may proceed to the Performance Criteria analysis described in Section 2.4.1.

#### 2.3.2.2 Receiving Water Data Analysis

Elkhart shall use its river model to evaluate in-stream water quality with appropriate analyses including the same analyses presented in Section 1 of this Appendix. These analyses include compliance with current water quality standards at key locations (including the State line), evaluating compliance with all sources and isolating the potential impact of any remaining Elkhart CSOs on in-stream water quality. These analyses will provide a before-and-after characterization of water quality, allowing Elkhart to quantify benefits and improvements to the river from the implementation of Elkhart's LTCP.

Elkhart shall use sound engineering judgment and best industry practices to use the monitoring data and river model to determine how often the river attains the designated uses (recreation and aquatic life). The river model is configured to evaluate recreation use by simulating *E. coli* fate and transport and is applied for the Typical Year. Like all computer models, the river model inevitably carries with it some inherent variability and calibration relies on reproducing the magnitude and timing of in-stream concentrations. Elkhart shall perform the following steps to update the collection system model calibration:

1. Collect data during dry and wet weather over a 12-month post-construction monitoring period after Achievement of Full Operations of all CSO Control Measures in the LTCP.

2. Perform quality assurance and quality control of the data collected in Step 1.

3. After Elkhart updates the collection system model calibration, Elkhart shall use the river model in its previously-calibrated state with collection system model results and the rainfall data collected during the monitoring period to run a continuous simulation of the Elkhart and St. Joseph Rivers for the 12-month post-construction monitoring period.

4. Compare the continuous simulation river model outputs to the in-stream *E. coli* monitoring data for the 12-month post-construction monitoring period to determine whether re-calibration of the river model is needed. Model re-calibration will not be needed if the model achieves at least the same degree of calibration as was achieved during the LTCP development process, and there is a high degree of agreement between the range of concentrations in the model output and monitoring data for the monitoring period. Otherwise, model re-calibration will be needed in accordance with Steps 5-6.



5. If re-calibration is needed, the Elkhart shall select one rainfall event from the 12-month post-construction monitoring period for model recalibration.

6. After Elkhart has recalibrated the river model using sound engineering judgment in accordance with standard industry practices, Elkhart shall verify the re-calibrated model by running another continuous simulation for the monitoring period. The continuous simulation period shall include at least two additional wet weather events. Thereafter, Elkhart shall again compare the continuous simulation outputs to the in-stream monitoring data as described in Step 4, to determine whether additional re-calibration is needed. Re-calibration will be conducted in accordance with Steps 5-6 until the model achieves at least the same degree of calibration as was achieved during the LTCP development process, and there is a high degree of agreement between the range of concentrations in the model output and monitoring data for the monitoring period.

This re-calibration procedure will result in model-data comparisons for at least three rainfall events. Standard modeling practice (Chapra, 1997) is to calibrate the model to a single dataset and then to confirm or validate the model's calibration by simulating at least one different dataset and comparing model predictions to monitoring data. In Elkhart's re-calibration approach, a single rainfall event will serve as the calibration dataset (Step 5). Elkhart then shall validate the model by running it for two other rainfall events (Step 6).

After Elkhart has adequately calibrated and validated the water quality model, based on re-calibration efforts, Elkhart shall prepare a Model Re-Calibration Report documenting the re-calibration and validation. With authorization from EPA and IDEM, Elkhart then may proceed to the Water Quality Standards Assessment described in Section 2.4.2.

## 2.4 Achievement of Performance Criteria

Following re-calibration (if necessary) of the collection system model using the criteria described in section 2.3.2.1 of this Appendix A, Elkhart shall use the validated collection system model to run a continuous simulation for the Typical Year to determine whether Elkhart has achieved the Performance Criteria set forth in Table 1-3. Elkhart shall be deemed to have achieved the Performance Criteria if the simulation shows nine or fewer Overflow Events system-wide, and only one overflow into Christiana Creek, based on Typical Year rainfall.

Elkhart expects that Elkhart's LTCP, when fully-implemented, will result in fully capturing all but nine storm events in a Typical Year along the Elkhart and St. Joseph Rivers, and all but one storm event in a Typical Year along Christiana Creek. Actual overflow frequency, however, will vary from year to year, depending on rainfall conditions. Nevertheless, the CSO control measures will capture for treatment the first part of each storm, known as the first flush, which carries the largest concentration of pollutants.

In Section 1 of this Appendix, Elkhart identified several outfalls that may be sealed if post-construction monitoring shows that closing the overflows would have no harmful effects during large storm events. This will be evaluated by reviewing peak hydraulic grade lines and flooding under large storm conditions. Assuming that monitoring confirms the absence of basement flooding or other adverse system effects, these outfalls will be permanently sealed. If monitoring and/or modeling do not confirm the lack of adverse system effects, the outfalls will need to remain open as system relief points during extreme storm events.

If model results show that Elkhart's LTCP did not meet the Performance Criteria in Table 1-3, Elkhart shall identify deficiencies or performance-limiting factors in system design, process, operations, and maintenance that may have limited the ability of the CSO Control Measures to achieve their intended performance. If necessary, Elkhart shall document corrective measures. If

alternative operating strategies, structural modifications, or additional facilities and processes are needed to meet applicable requirements, Elkhart shall identify them in the final Post-Construction Monitoring Report. If necessary, Elkhart shall submit to EPA and IDEM for review and approval a plan and schedule for the implementation of additional CSO controls necessary to allow the combined sewer system to meet the Performance Criteria in Table 1-3.

#### 2.4.2 Water Quality Standards Assessment

After implementing the LTCP, Elkhart shall use the water quality model to evaluate whether or not residual CSO Discharges interfere with designated uses. Elkhart then shall submit to the United States and Indiana a Post-Construction Water Quality Assessment Report documenting Elkhart's analysis based on Typical Year performance.

### 2.5 Progress Reporting

This section describes the Semi-Annual Reports and the Post-Construction Monitoring Report that Elkhart is required to prepare to document progress in implementing Elkhart's LTCP, meeting milestone dates, and achieving the Design Criteria and Performance Criteria required in Section 1 of this Appendix. Elkhart shall submit all reports to the United States and Indiana for their review and approval.

#### 2.5.1 Semi-Annual Reports

Elkhart is required to submit a Semi-Annual Report by July 31 of each year for the preceding six months between January 1 and June 30; and by January 31 of each year for the preceding six months between July 1 and December 31; that shall include:

1. a statement of all deadlines that the Consent Decree required Elkhart to meet during the six-month period, whether and to what extent Elkhart met those requirements, and the reasons for any noncompliance. Notification to the United States and Indiana of any anticipated delay shall not, by itself, excuse the delay;
2. a general description of the work completed within the six-month period, and a projection of work to be performed pursuant to the Consent Decree during the next six month period;
3. information generated pursuant to the requirements of the Long Term Control and any Supplemental Compliance Plan required by the Decree; and
4. copies of all Monthly Monitoring Reports and other reports pertaining to CSO discharges and bypassing that Elkhart submitted to IDEM in accordance with Elkhart's Current Permits during the six-month period.

If Elkhart violates, or has reason to believe it may violate, any requirement of the Consent Decree, Elkhart is required notify the United States and Indiana of such violation and its likely duration in writing within ten working days of the day Elkhart first became aware of the violation or potential violation, with an explanation of the violation's likely cause and of the remedial steps taken, or planned, to prevent or minimize the violation. If the cause of the violation cannot be fully explained at the time the report is due, Elkhart shall include a statement to that effect in the report. Elkhart shall investigate to determine the cause of the violation and then shall submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the day Elkhart becomes aware of the cause of the violation.



## 2.5.2 Final Post-Construction Monitoring Report

Within three years following Achievement of Full Operations of all CSO Control Measures in Table 1-3 of this Appendix, Elkhart shall submit a final Post-Construction Monitoring Report to the United States and Indiana. Pursuant to the Consent Decree, the final Post Construction Monitoring Report shall:

- a. demonstrate that Elkhart implemented the Post-Construction Monitoring Plan in compliance with the schedule and terms set forth therein;
- b. evaluate whether or not the Facility improvements and other remedial measures required by the Long Term Control Plan, as constructed, operated, or otherwise implemented, meet the Design Criteria and Performance Criteria required by the Long Term Control Plan;
- c. summarize the data collected during the entirety of the Post-Construction Monitoring Plan and include any new data relevant to the evaluation that Elkhart did not previously submit to EPA or IDEM;
- d. evaluate whether or not Elkhart has any Unlisted Discharges;
- e. evaluate whether or not Elkhart's remaining CSO Discharges, if any, comply with all applicable requirements in the Long Term Control Plan and Elkhart's Current Permits; and
- f. evaluate whether or not Elkhart has eliminated Bypasses, or to the extent that Elkhart has not eliminated Bypasses, evaluates whether or not Elkhart's remaining Bypasses meet the conditions governing Bypass in Elkhart's Current Permits.

The purpose of the Final Post-Construction Monitoring Report shall be to document how well Elkhart's entire Facility is performing as a whole, following completion of all CSO Control Measures, and shall include an assessment of whether the Facility is meeting the Performance Criteria regarding system-wide Overflow Event frequency. Elkhart also shall report overflow volume measured during the monitoring period and estimated based on collection system modeling of Typical Year performance. After completing construction of all CSO Control Measures, Elkhart shall monitor a series of rainfall events for at least 12 months or longer if needed to obtain data regarding a sufficient number of rainfall events consistent with Design Criteria have occurred so that Elkhart can obtain sufficient sampling data. Elkhart may, however, request that EPA and IDEM allow a monitoring period shorter than 12 months if Elkhart believes that it has collected sufficient monitoring data. A request for a monitoring period shorter than 12 months, however, is subject to the unreviewable discretion of EPA and IDEM and Elkhart may not invoke dispute resolution procedures in this Consent Decree for any denial of such a request by either EPA or IDEM.

The Final Post-Construction Monitoring Report shall evaluate whether CSO Control Measures were constructed as designed and are performing as designed and expected. Elkhart shall use the collection system model to evaluate Typical Year performance and whether Elkhart achieved Performance Criteria. In the Final Post-Construction Monitoring Report, Elkhart also shall assess water quality conditions in CSO receiving streams to compare to baseline conditions, using the water quality model. As described earlier in Section 2.4, if necessary, Elkhart shall include in the Final Post-Construction Monitoring Report a description of additional facilities, processes or operating strategies necessary to meet the Performance Criteria regarding Overflow Event frequency in Table 1-3. Table 2-2 summarizes some of the data, analysis, and information that will be included in the Final Post-Construction Monitoring Report.

Table 2-2 Final Post-Construction Monitoring Report Contents

Watershed	CSO Outfalls	Expected Number of Activations After LTCP Implementation	12 Month Monitoring Data <sup>1</sup>		Modeled Typical Year Performance <sup>2</sup>		Performance Criteria Met? <sup>3</sup>		Critical Milestones Met?		Comments
			CSO Volume	Overflow Frequency	CSO Volume	Overflow Frequency	Yes	No	Yes	No	
Christiana Creek CSO Control Measure 1											
Christiana	CSO 14										
Upper Elkhart River CSO Control Measure 2											
Elkhart	CSO 4										
Elkhart	CSO 16	8									
Elkhart	CSO 30										
Elkhart	CSO 31	8									
Elkhart	CSO 33										
Lower Elkhart River CSO Control Measure 4											
Elkhart	CSO 6	9									
Elkhart	CSO 7	7									
Elkhart	CSO 8										
Elkhart	CSO 11	6									
Oakland Avenue CSO Control Measure 5											
St. Joseph	CSO 24	7									
St. Joseph	CSO 37	9									
Upper St. Joseph River (Direct) Control Measure 6											
St. Joseph	CSO 13										
St. Joseph	CSO 25	9									
St. Joseph	CSO 26										
St. Joseph	CSO 29										
St. Joseph	CSO 39										
Lower St. Joseph River CSO Control Measure 7											
St. Joseph	CSO 17										
St. Joseph	CSO 18	6									
St. Joseph	CSO 19										
St. Joseph	CSO 20	6									
St. Joseph	CSO 21										
St. Joseph	CSO 23										
St. Joseph	CSO 32										
Riverside Drive CSO Control Measure 8											
St. Joseph	CSO 15	8									
Previously Controlled CSO Locations											
Elkhart	CSO 5								NA	NA	
Elkhart	CSO 9								NA	NA	
St. Joseph	CSO 12								NA	NA	
St. Joseph	CSO 27								NA	NA	
St. Joseph	CSO 28								NA	NA	
St. Joseph	CSO 34								NA	NA	
St. Joseph	CSO 40								NA	NA	
St. Joseph	CSO 41								NA	NA	
St. Joseph River - Systemwide Performance <sup>3</sup>											
	All										

Notes:  
NA = Not applicable

<sup>1</sup> After completing construction of all CSO Control Measures, Elkhart shall monitor a series of rainfall event for at least 12 months or longer if needed to obtain data regarding a sufficient number of rainfall events consistent with design criteria so that Elkhart can obtain sufficient sampling data. Elkhart may, however, request that EPA and IDEM allow a monitoring period shorter than 12 months if Elkhart believes that it has collected sufficient monitoring data. A request for a monitoring period shorter than 12 months, however, is subject to the unreviewable discretion of EPA and IDEM and Elkhart may not invoke dispute resolution procedures in this Consent Decree for any denial of such a request by either EPA or IDEM.

<sup>2</sup> Typical Year Performance Criteria of no more than 9 Overflow Events system-wide (and no more than 1 overflow event on Christiana Creek) are based on using the collection system model to evaluate the efficacy of the CSO Control Measures using the rainfall data for a Typical Year. Elkhart shall assess Typical Year performance again after completing construction of all CSO Control Measures with this post-construction simulation after first confirming the sewer collection system model is adequately calibrated and validated, as described in Section 2.3.2.

<sup>3</sup> Performance Criteria regarding Overflow Event frequency will be met if there are no more than 1 overflow events in a typical year to Christiana Creek and no more than 9 Overflow Events system-wide during a Typical Year.

As noted earlier, Elkhart also will monitor and report on water quality improvements in CSO receiving streams. Water quality improvements and attainment of designated uses will be evaluated using monitoring data and river model results. Elkhart shall evaluate the attainment of aquatic life uses using the post-construction monitoring data for dissolved oxygen, temperature and pH. Elkhart shall use the post-construction monitoring data for *E. coli* to update the river model calibration if needed.

## 2.6 Summary

Elkhart shall monitor its sewer system and area waterways during and after construction to determine the effectiveness of the CSO Control Measures. Elkhart's Post-Construction Monitoring Program shall include:

- Semi-Annual Reports that document whether Elkhart has built the CSO Control Measures required in Table 1-3 of this Appendix and that they are meeting the Design Criteria;
- A Final Post-Construction Monitoring Report to document whether the CSO Control Measures have achieved their Performance Criteria; and
- Monitoring and reporting of in-stream water quality improvements and reductions in CSO volume, frequency and duration when compared to baseline conditions and a determination of whether residual CSOs continue to impair the designated uses.