

St. Joseph River Watershed Fish Migration Barrier Inventory

Prepared by:



Potawatomi
Resource Conservation
& Development Council
We Bring People, Places, and Projects Together

2011

Acknowledgements

Funding For This Project Was Provided By
United States Fish & Wildlife Service National Fish Passage Program



Special Thanks For The Extraordinary Effort Put Forth By
Biologist Daragh Deegan and the City of Elkhart, Indiana

Thank You Also To All Those Groups That Provided
Volunteer (In-Kind) Match To Make This Project A Success:

Fishbeck, Thompson, Carr & Huber, Inc.
Friends of the St. Joe River Association, Inc.
Indiana Department of Natural Resources
Michigan Department of Natural Resources
Southwest Michigan Planning Commission
Streamside Ecological Services, Inc.
United States Army Corps of Engineers
Various Conservation Districts

Table of Contents

Introduction.....1

Methods.....3

 Culvert Inventory3

 Dam Inventory4

Results10

 Culvert Inventory10

 Dam Inventory11

Discussion and Recommendations14

Lessons Learned.....14

List of Tables

Table 1. Dams Presented to Committee for Review15

Table 2. Dams Reviewed by Committee, with Location Information24

Table 3. Prioritization Scores for Dams Selected for Further Study31

Table 4. Results of Culvert Inventory35

Table 5. Highest Priority Crossings38

List of Figures

Figure 1. St. Joseph River Watershed 1

Figure 2. Dams Found in Existing Information and Databases5

Figure 3. Dams Determined to be Worth Investigation, by the Project Committee7

Figure 4. Field Inspected Culverts and Priority Ranking10

Figure 5. Field Inspected Dams and Priority Ranking11

List of Exhibits

Exhibit 1. St. Joseph River Dam Inspections 2010/2011

List of Appendices – On CD

Appendix 1. Culvert Assessment Data Form

Appendix 2. Dam Assessment Data Form

Appendix 3. Culvert Maps, Completed Assessment Data Forms and Photographs

Appendix 4. Dams, Completed Assessment Data Forms and Photographs

Appendix 5. Interactive Mapping Application of Dam and Culvert Inspection Map for use with ESRI ArcReader software. Map includes hyperlink from culvert and dam point locations to inspection reports.

Introduction

The St. Joseph River basin, located in southwest Michigan and northeast Indiana, is the third largest river basin in Michigan (Figure 1). The St. Joseph River mainstem is 210 miles long, and its tributary streams total an additional 1,641 miles. The river drains a watershed of 4,685 square miles: 3,000 square miles in Michigan and 1,685 square miles in Indiana. Its major tributaries are the Coldwater, Prairie, Fawn, Pigeon, Elkhart, Dowagiac, and Paw Paw Rivers.

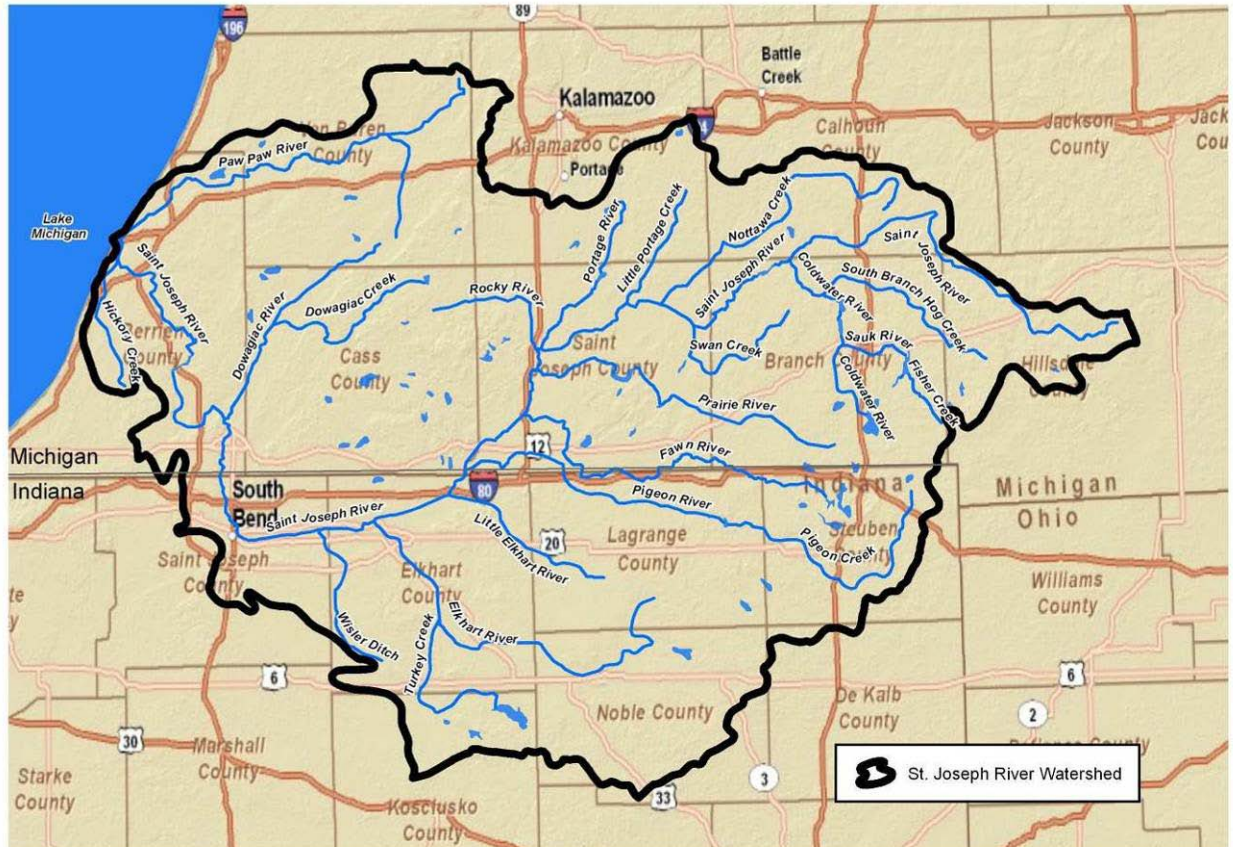


Figure 1. St. Joseph River Watershed

Indigenous freshwater fish populations in the St. Joseph River system are negatively affected by obstructions to fish passage. Natural movements of fish throughout the watershed are restricted or eliminated due to a large number of dams and an unknown number of “impassable” culverts. Artificial barriers such as dams, weirs, causeways and perched or under-sized culverts obstruct the free passage of native fish by preventing or impeding their movement from one part of a stream or river system to another. Many species of fish must move between habitat areas at some stage in their life cycle to spawn or seek food and shelter, with many having definite migration requirements. Obstructions which impede the free passage of fish often result in declining populations or extirpations, as documented in the Michigan Department of Natural Resources (MDNR) St. Joseph River Assessment (1999). The hydrologic condition of the river determines the extent and continuity of the obstruction. Some obstructions prevent fish passage in periods of low flow. Some may allow the movement of fish in times of flood when high water levels provide free passage and the obstacle is said to be 'drowned-out'. Some obstacles prevent

fish passage at all times, and are therefore a total barrier, which leads to local extinction of migratory species upstream, and perhaps even downstream. The physical conditions and economic viability (e.g., cost of repairs and maintenance versus cost of removal) of most of the 190 dams in the watershed are unknown. This information is critical for identifying barriers (dams, culverts, etc.) that are potential candidates for removal, initiating discussions with barrier owners, and allocating resources to projects with the highest benefit (in terms of restored fish passage) to cost ratio.

The overall goal of this project is to identify migration barriers that meet conditions for removal, modification or further study.

To accomplish this goal, this project was designed to:

1. Gather site-specific information for fish migration barriers that exist within the St. Joseph River watershed.
2. Prioritize the obstructions found in terms of the need to provide fish passage at a given site and the relative ease of removal.
3. Prepare a strategic plan of future actions and funds needed to address the problems posed by the obstruction identified and cataloged.

Methods

A project committee (Committee) was formed to manage and guide this project. The committee consisted of: Potawatomi Resource Conservation and Development (RC&D); Michigan Department of Natural Resources (MDNR); Indiana Department of Natural Resources (IDNR); United States Fish & Wildlife Service (USFWS); City of Elkhart, IN (City); Streamside Ecological Services, Inc. (SES); Fishbeck, Thompson, Carr & Huber (FTCH); Friends of the St. Joseph River; Southwest Michigan Planning Commission and; United States Army Corps of Engineers (USACOE). This Committee met on approximately a monthly basis during project planning and data collection. As a Committee, methods for achieving the goals of the project were discussed prior to conducting any on-the-ground activities.

Culvert Inventory

A detailed culvert inventory was completed on ‘high-priority’ streams in the watershed. These high-priority streams were identified within the Committee, and in large part, through guidance and input from MDNR, IDNR and City biologists, who are the most familiar with the stream resources of the watershed. Specifically, the biologists made recommendations for high-quality waters that harbor desirable aquatic communities. The following streams were identified:

- Blue Creek
- Yellow Creek (Big Meadow Drain)
- Pipestone Creek
- Love Creek (North and South)
- Lemon Creek
- Fawn River
- Christiana Creek
- Little Elkhart River

Once streams for assessment were identified, SES and partner volunteers completed inventories of each stream. The inventories were completed by stopping at each road crossing on the stream of interest. If the crossing consisted of a culvert, the location was recorded using a Global Positioning System (GPS) and an assessment was completed using a form pre-approved by USFWS (Appendix 1). Each site was scored according to its ‘passability’ based upon criteria set forth in the data forms (0 – Most species and life stages cannot pass at most flows; 0.5 – Some species and/or life stages cannot pass at most flows; 0.9 – Barrier at high flows; 1.0 – Not a barrier). If the crossing consisted of a bridge or other open-span structure, no data form was completed, but GPS information was collected. Photographs of all culverts, and many bridges, were obtained.

Upon completion of field inventories, all data sheets were copied and scanned, and GPS data and photographs were downloaded and submitted to FTCH. These data were then plotted or otherwise prepared for use in a Geographic Information System (GIS).

Dam Inventory

FTCH used GIS software to map the point location of existing dams within the watershed. Several previous studies and reports contained tables with information recorded on the dams in Microsoft Excel format. Environmental Systems Research Institute (ESRI) ArcGIS software was used to import and merge the tabular data with the dam geographic point locations so that all of the recorded information could be reviewed, selected and queried within the same spatial mapping environment. Map layers and their data sources are listed below:

- **Base Maps:**

The St. Joseph River Watershed encompasses lands in fifteen (15) counties located in Michigan and Indiana. ESRI ArcOnline web map services were used to provide continuous base maps at multiple zoom levels across the watershed.

- World Street Map – 2009 ESRI and TeleAtlas for North America.
- Aerial Imagery – ESRI and USDA FSA National Agricultural Imagery Program NAIP 2009.
- USA Topo Maps – ESRI and National Geographic Society, USGS Topography Maps, 2009.
- US Counties – ESRI and the US Department of Commerce, Census Bureau, 2006.

- **Watershed:**

- St Joseph River Watershed HUC 8-04050001, downloaded from Michigan Center for Shared Solutions and Technology Partnerships Geographic Data Library. Hydrology dataset (250K) provided by Michigan Department of Environmental Quality (MDEQ).
- St Joseph River Watershed HUC 14 subwatersheds provided by USDA Natural Resource Conservation Service as modified by St. Joe River Association.

- **Dams:**

- Lake Michigan Basin Dams downloaded from the Great Lakes Information Network (GLIN). Dam point locations provided by the Great Lakes Geographic Information System and the Institute for Fisheries Research, 2006.
- MDEQ Dam Safety Unit Report
- St. Joseph River Assessment (Wesley and Duffy 1994)

- **Procedure:**

A preliminary dam location point file for Lake Michigan Basin was downloaded from Great Lakes Information Network (GLIN) <http://gis.glin.net/ogc/services.php> . A GIS mapping project for the watershed was set up in ESRI ArcView software. The GLIN dam point file was added to the map and ArcView tools were used to select only those dams from the Lake Michigan Basin that area contained within the watershed. A dam location point file was also downloaded from the State of Indiana Department of Natural Resources which included a few more dam point locations in Indiana. These were added to create the dam layer “GLIN modified.” The modified dam point file contained 186 dams; 22 dams in Indiana and 164 dams in Michigan (Figure 2).

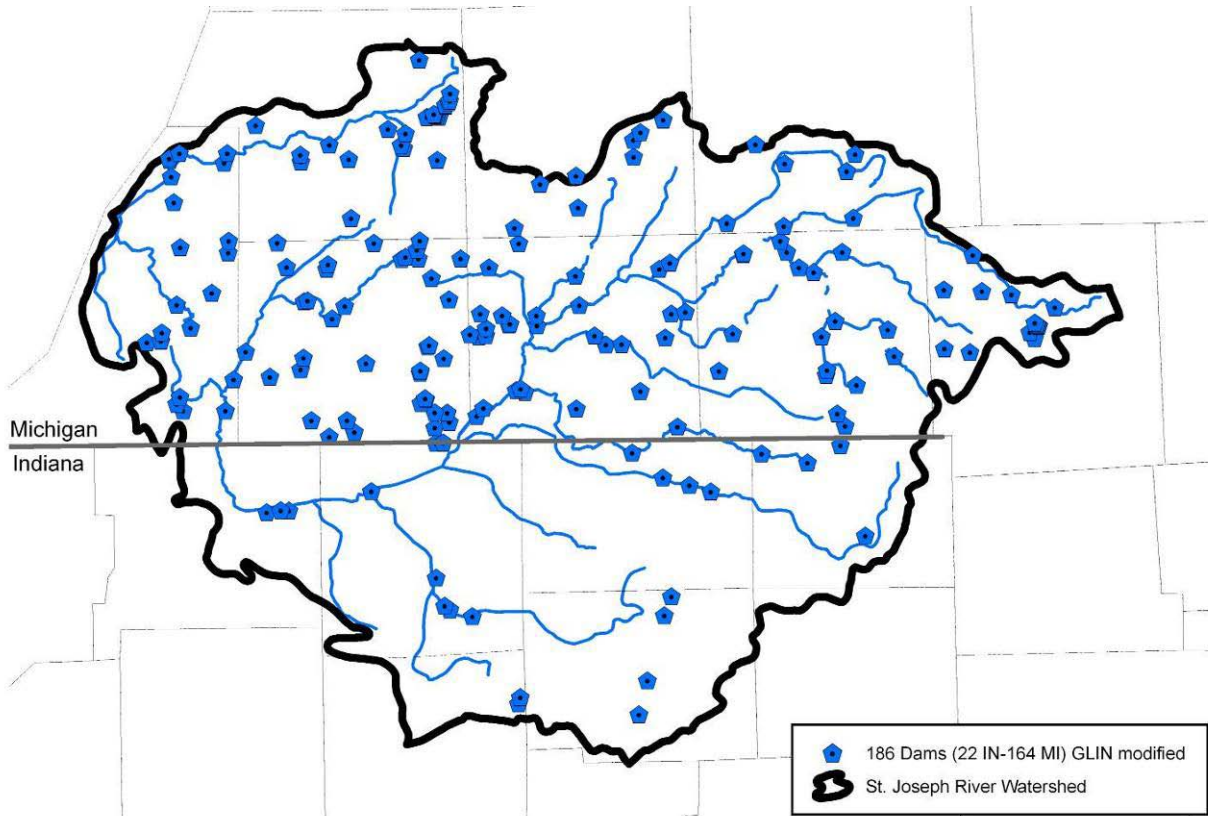
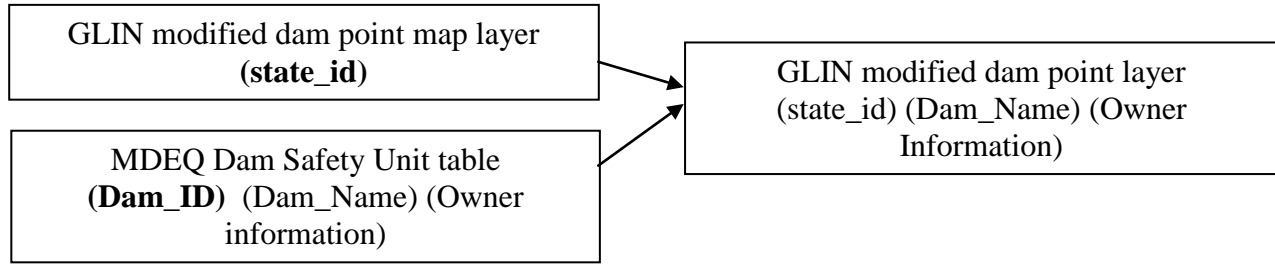


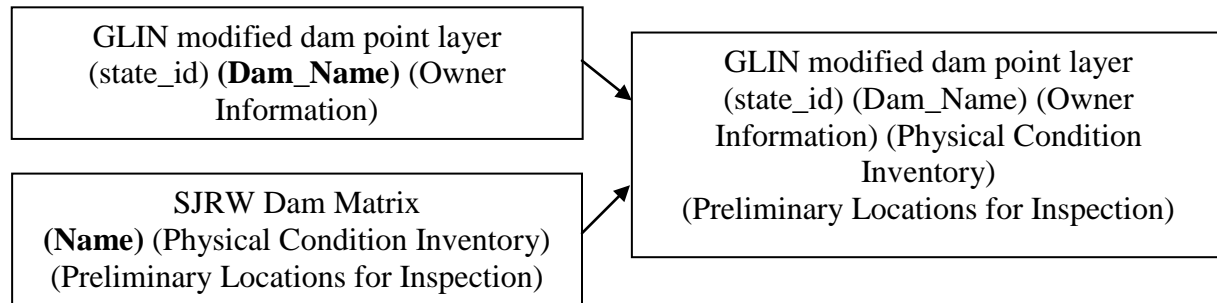
Figure 2. Dams Found in Existing Information and Databases

In an effort to incorporate the most complete data set available, (USACOE) National Inventory of Dams on line web mapping application was also reviewed. The USACOE dam locations were found to be similar to the GLIN data file. Although the USACOE data could be viewed on line, it required additional permissions to download datasets. As there appeared to be no significant difference between the datasets, we proceeded with the GLIN data file. The dam point file contained attributes for numerical codes for dam identification; Lake Michigan Dam ID (lmgis_id), State ID (state_id) and National ID (nat_id) fields. However, the proper or local name of dam was not provided.

The MDEQ Dam Safety Unit maintains a Microsoft Excel table with information on dams located within the State. Records for dams located within the watershed were exported and provided for use in this project. The GLIN attribute table included a numeric field for State ID (state_id) and the Dam Safety Unit table included fields for both Dam ID (Dam_ID) and name (Dam_Name). ArcView was used to join the Dam Safety Unit table to the GLIN dam file based on the common attribute field, state_id = Dam_ID, so that dam names could be added to the GLIN modified dam table.



The St. Joseph River Assessment contained a Microsoft Excel table of dam information based on the name of dam, but no geographic location was included. With the dam name added to the GLIN modified dam point file, we were able to join the Dam Matrix data fields to the GIS dam point location map layer. The result allowed us to spatially view and query the fields of information kept in the Dam Matrix table within the GIS map project.



With the local dam names successfully attached to the point locations in the GIS, maps were produced with name labels and tables of dams listed by community. These maps and tables were used by the Project Committee to review the completeness of the dam locations included in the GIS and offer comment on potentially misplaced or missing dams. The Committee was able to resolve many of the naming format issues inherit in the various tables and increase the number of matches between the dam point ID numbers and dam names.

The completed process allowed for query and display information in a visual map application that was previously stored only in table format. For example, the matrix included a field for Region within the watershed. As shown in the figure below, the GLIN dam locations are now symbolized by the Dam Matrix data field Region. Dam locations were identified in the GLIN point files that were not included in the Dam Matrix. In the figure below, 17 dams were located in the GLIN file that did not have matching names in the Dam Matrix. By reversing the table join, 60 dams were found in the Dam Matrix that were not matched to dam names in the GLIN file. The unmatched dam names referred to dams that had not been previously identified as priority dams for inspection. Therefore, the project proceeded using the complete information for the 186 successfully identified and joined dam locations.

Additional attribute fields were added to the dam point file to track actual project inspection of the dams and a project priority rating that resulted from the inspection. A document link attribute field was added to enable hyperlinks that open files for scanned dam inspection reports and photos from within the GIS map viewer.

Once all existing information was compiled and the list of dams was as complete as possible, a list of 186 dams was presented to the Committee for review (Tables 1 and 2). The Committee went through the list dam by dam to eliminate those structures that have little, or no, chance for removal based upon criteria such as their current hydropower capacity and their creation of large impoundments developed with residential housing. The results of this initial review reduced the total number of dams to be considered for inspection to 85 (Figure 3).

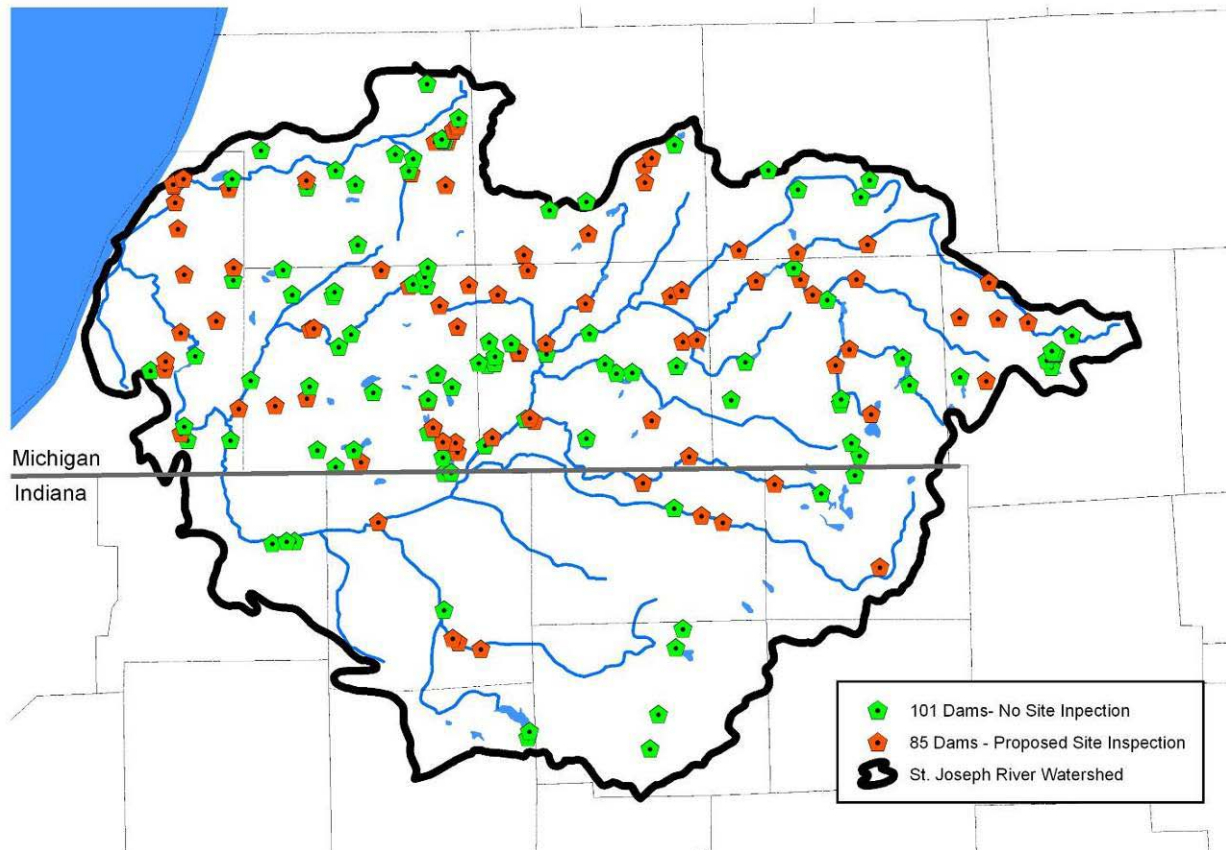


Figure 3. Dams Determined to be Worth Investigation, by the Project Committee

As an initial step to systematically prioritize the list of 85 remaining dams based upon their potential for removal or modification, a matrix was developed using the following criteria and scoring system:

Positive Habitat Impact Score:

- Resource Quality – Based upon Michigan and Indiana DNR – Fish Division comments
 - Low Priority Warmwater = 1
 - Low Priority Coldwater = 2
 - Medium Priority Warmwater = 3
 - Medium Priority Coldwater = 4
 - High Priority Warmwater = 5
 - High Priority Coldwater = 6

- Miles Reconnected Upstream – Based upon review of aerial photography
 - 0 to 1 miles = 1
 - 1.1 to 6 miles = 2
 - 6.1 to 11 miles = 3
 - 11.1 to 20 miles = 4
 - 20.1 to 40 miles = 5
 - Over 40 miles = 6
- Aquatic Federal/State Threatened and Endangered or Priority Species or Habitat Present
 - No T&E species = 0
 - Special Concern Species = 3
 - One or more T&E species = 6

Partner Priority Score:

- The barrier listed in any Watershed Management Plan, watershed assessment or other document as being a priority. Partners or agencies discussed the barrier as a priority.
 - Not a Priority = 0
 - Priority, but not specifically listed = 3
 - Listed in a document as a priority = 6

Cost Score:

- Structure Size (height x width) has a direct impact on cost of removal.
 - Over 1,200 square feet = 1
 - 501-1,200 square feet = 2
 - 251-500 square feet = 3
 - 141-250 square feet = 4
 - 81-140 square feet = 5
 - 0-80 square feet = 6
- Structure Age (If age was not known, the dam was assigned a score of 4.2, which was the average score for dams with known ages)
 - 1981 to present = 1
 - 1960 to 1980 = 2
 - 1940 to 1959 = 3
 - 1920 to 1939 = 4
 - 1900 to 1919 = 5
 - Pre 1900 = 6
- Pond Size (the larger the pond, the more sediment to deal with assuming sediment control and/or disposal is a costly part of dam removal projects) was determined using aerial photography.
 - Over 50 acres = 1
 - 21 to 50 acres = 2
 - 11 to 20 acres = 3
 - 6 to 10 acres = 4
 - 3 to 5 acres = 5
 - 0 to 2 acres = 6

Social Score:

- Dam purpose was determined from existing information.
 - Hydroelectric = 1
 - Flood Control = 2
 - Recreation = 3
 - Water supply = 3
 - Irrigation = 4
 - Other = 5
 - Retired Hydroelectric = 6
- Pond Size (the larger the pond, the more homes that may be on the pond) was determined using aerial photography.
 - Over 50 acres = 1
 - 21 to 50 acres = 2
 - 11 to 20 acres = 3
 - 6 to 10 acres = 4
 - 3 to 5 acres = 5
 - 0 to 2 acres = 6

Positive Habitat Impact Score, Partner Priority Score, Cost Score and Social Score were totaled, resulting in a Final Score for each dam. This process resulted in a prioritization of all dams on the list, with a range of total scores from 12 to 43 (Table 3).

This ranking matrix served as the basis for directing field inventories. The Committee decided that all dams scoring greater than 26 should be assessed in the field. The score of 26 was chosen as an arbitrary cutoff that resulted in inspection of the approximate target number of dams. Thirty eight of the 42 dams that met this minimum score, along with seven dams that were ‘en route’, and one ‘unknown’ dam (Paw Paw City Dam) were visited by SES and/or Committee volunteers. A pre-approved data form was used to record site-specific information for any dam that appeared to have potential for removal (Appendix 2).

Results

Culvert Inventory

A total of 101 crossings in eight different subwatersheds were inspected, resulting in an inventory of 53 culverts and 42 bridges and six ‘other’ crossings or obstructions (Table 4). [Please Note: Little Elkhart River was also assessed, in part, but too late for inclusion in this report; results of these inspections are included in Appendix 3 of this document]. Fifteen of these sites received a passability score of “0” (passage issues at all flows), ranking them as highest priority (Table 4). Of the others, 19 sites were scored “0.5”, nine were scored “0.9” and 58 were scored “1” (no passage issues at any flow) (Figure 4). Appendix 3 includes individual maps, data forms and photographs for Blue Creek, Christiana Creek, Fawn River, Lemon Creek, Love Creek (north), Love Creek (south), Pipestone Creek and Yellow Creek (Big Meadow Drain) and Little Elkhart River (photos only), respectively.

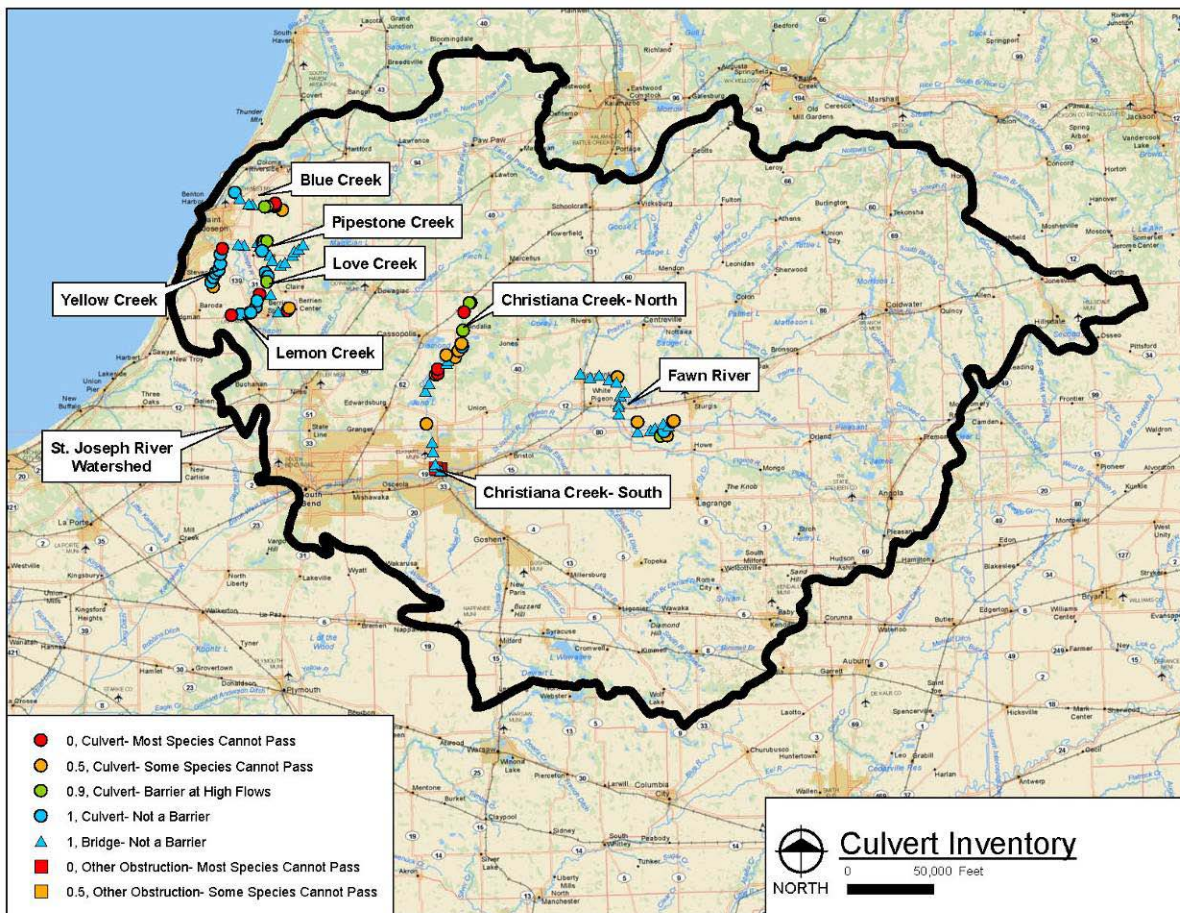


Figure 4. Field Inspected Culverts and Priority Ranking

Dam Inventory

A total of 43 dams were either inspected in the field, or an attempt was made to find and inspect them (Figure 5). Of those 43 dams, one is being studied for removal; 22 no longer exist, are no longer functional, do not impact migration or could not be found; six have a very low likelihood of removal. Data forms were completed at 14 dams that appeared to have potential for removal or modification.

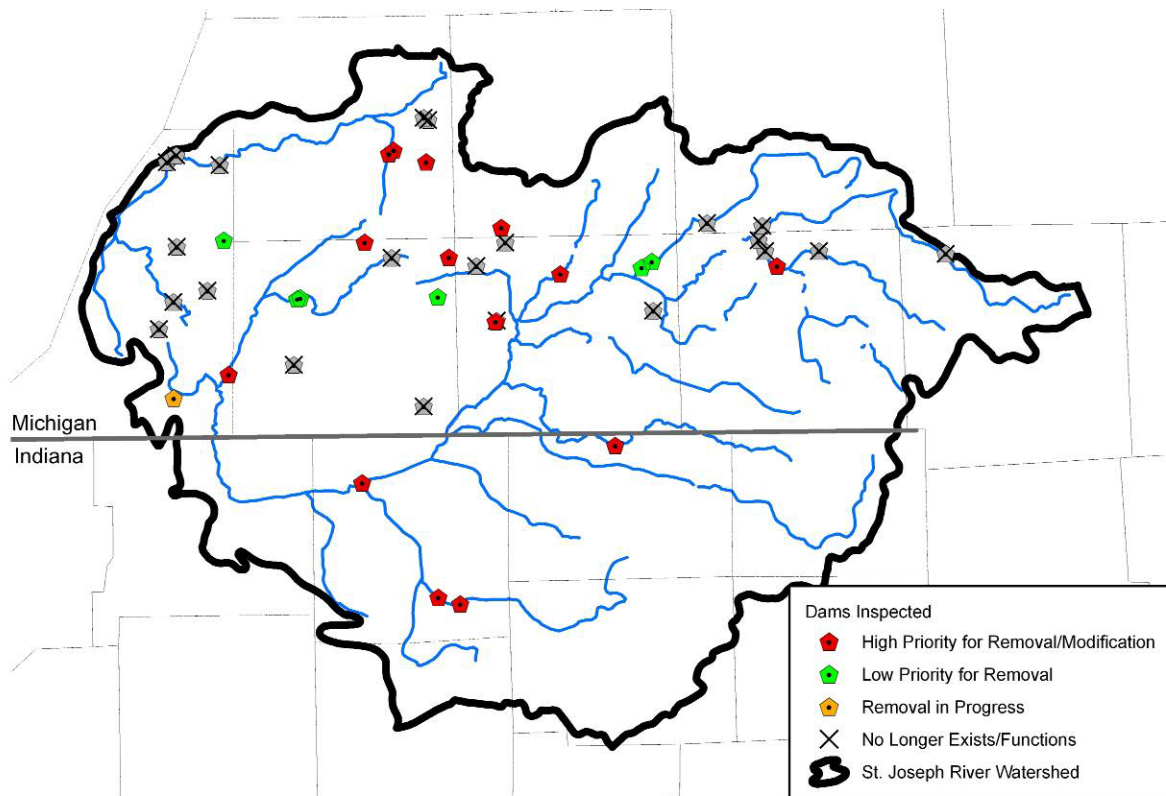


Figure 5. Field Inspected Dams and Priority Ranking

The following dam was determined to be **high-priority** based upon the matrix, and is currently being studied for removal:

- **McCoy Creek Dam** is located in Buchanan, Berrien County, MI.

The following 22 dams may **no longer exist, no longer function as migration barriers or could not be found**:

- **Watervliet Dam** was on the Paw Paw River located in Watervliet, Berrien County, MI. The dam was removed October 2011.
- **Andres No. 1** is bypassed by Love Creek via erosion around the dam. (Berrien County, MI)
- **Andres No. 2** is bypassed by Pipestone Creek via erosion around the dam. (Berrien County, MI)
- **Almena Dams** no longer exist or appear to be bypassed. (Hayden Creek, Van Buren County, MI)

- **Sharpe Dam** no longer exists.
- **Randall Milling Dam** no longer exists.
- **Maxson's Dam** cannot be located and is apparently gone.
- **Flowerfield Dam** cannot be located and is apparently gone.
- **McGee Dam** cannot be located and is apparently gone.
- **Athens Dam** is bypassed with another stream channel. (Nottawa Creek, Calhoun County, MI)
- **Grabber Dam** cannot be located and is apparently gone.
- **Centennial Mill Dam** cannot be located and is apparently gone.
- **Storick Dam** cannot be located and is apparently gone.
- **Fisher Dam** cannot be located and is apparently gone.
- **Old Masonry Dam** cannot be located and is apparently gone.
- **McMillan Dam** cannot be located and is apparently gone.
- **Mayes Dam** cannot be located and is apparently gone.
- **Litchfield Dam** appears to be bypassed and does not serve as a migration barrier. (St. Joseph River, Hillsdale County, MI)
- **Cold Spring's Mill Dam** cannot be located and is apparently gone.
- **McCormick Dam** cannot be located and is apparently gone.
- **O'Leary Dam** cannot be located and is apparently gone.
- **Teeny Tiny Lake Dam** cannot be located and is apparently gone.

The following six dams were determined to have a **very low likelihood for removal, but could be modified** with fish passage structures (Appendix 4):

- **Leonidus Roller Mill Dam** on Nottawa Creek in St. Joseph County, MI appears to have failed, in part, in the past. A channel bypasses the dam to the south, and grade is controlled by at least one rock dam. Modification of this channel for fish passage improvements appears to be feasible.
- **Streater Mill Dam** on the Rocky River in Cass County, MI serves as a lake control structure.
- **Pipestone Lake Dam** on Pipestone Creek/Lake in Berrien County, MI serves as a lake control structure.
- **Upper Mill Dam** on Dowagiac Creek in Cass County, MI serves as a lake control structure.
- **Lower Mill Dam** on Dowagiac Creek in Cass County, MI serves as a lake control structure.
- **Kings Mill Dam** on Nottawa Creek in St. Joseph County, MI is located in a county park and serves as a central feature to the park. It also holds back a relatively large impoundment; though there are few homes, the wetlands associated with it appear to be extensive and of high quality.

The following 14 dams were determined to be **high-priority candidates for removal or modification** (Appendix 4):

- **Pucker Street Dam** is located on M-51 in Berrien County, MI on the Dowagiac River. The dam is owned by the City of Niles.
- **Parkville Dam** is located on the Portage River in St. Joseph County, MI (T5S, R11W, Sec 23). Steel beams protruding from the stream bottom are all that remain of the original dam

structure. These beams protrude about every two feet across the width of the stream, and hold back rocks and woody debris. A small head is created from the debris jam.

- **Benton Dam** is located in Elkhart County, IN (T35N, R6E, Sec 12), on the Elkhart River. This dam is retired hydropower and is currently used for recreation.
- **Elkhart River Dam** is located in Elkhart County, IN (T37N, R5E, Sec 5). The dam is serving no apparent function.
- **Meyer Dam** is on the Dowagiac Creek in Van Buren County, MI (T4S, R14W, Sec 32). The dam is privately owned and does not appear to serve any function. An adjacent pond does not appear to be connected to the stream or dam.
- **Adams Dam** is on the East Branch of the Paw Paw River in Van Buren County, MI and is reportedly privately owned. Originally constructed for site development by Hoss Adams, the current landowner loves the impoundment and the wildlife that it brings. The impoundment appears to be only a foot or two deep.
- **Stancer Road Dam** is on the Coldwater River in Branch County, MI. It is a relatively low-head dam that is located under, and may serve as support for, the Stancer Road bridge.
- **Paw Paw Lumber Dam** on the East Branch of the Paw Paw River is located in the City of Paw Paw, just upstream (east) of M-40 in Van Buren County, MI.
- **Fox and Bears Dam** is on Flowerfield Creek in Kalamazoo County, MI on the Olde Mill Golf Club. The dam is dilapidated, but does create an impoundment that serves as an aesthetical feature and likely a water hazard on the golf course.
- **Pollock Dam** is located near Marcellus in Cass County, MI and is an earthen dam with a culvert outlet apparently controlled by stop logs. The impoundment was being drawn down on the date of inspection.
- **Baintertown Dam** is located in Elkhart County, IN, (T35N, R5E, Sec 3) on the Elkhart River. This is a retired hydropower dam. A proposal has been submitted for an engineering and feasibility study.
- **Paw Paw ‘City Dam’** on the Paw Paw River is located on the south side of Paw Paw Village in Van Buren County, MI (T3S, R14W, Sec 14). This is a low head dam apparently operated by the Village of Paw Paw, near a Village owned building at the end of 36 ½ Street.
- **Leverence Dam** is on Kerr Creek in St. Joseph County, MI (T6S, R12W, Sec 14). It is reportedly owned by the resident at the home adjacent the dam, and on the date of the inspection, the owner was not interested in removal.
- **Star Mill Dam** is located in Grange County, IN (T35N, R53, Sec 36) on the Fawn River. This is a retired hydropower dam.

Blackhawk Dam (Coldwater River, Branch County, MI) and Neib Dam (McKinzie Creek, Cass County, MI) could not be seen or accessed on two separate occasions. To access the dam, private property must be traversed; the landowner was not home during either visit.

Discussion and Recommendations

The completion of the accurate mapping and field verification allows a strategic approach to fish passage barrier removals or modifications. This report is intended to provide baseline information necessary for conservation organizations, local, state, federal and tribal governments and other project partners to identify and organize fish passage improvement projects. It is recommended that this report and associated project data is housed and distributed by Potawatomi RC&D, or a group such as Friends of the St. Joe River Association, which is not restricted by political boundaries and has the capacity to manage and lead watershed-wide improvement efforts. Digital data and field reports for this project are accessible in GIS format and the project can be used to store additional data sets as they are collected (Appendix 5).

Efforts should focus on working with project partners to implement projects at sites identified within this report. Exhibit 1 illustrates the overall findings of this project. This project has already resulted in the funding of implementation work on two Berrien County streams, thanks to efforts of the Southwest Michigan Planning Commission, Michigan Department of Transportation, the Berrien County Road Commission, MDNR, and their project partners. MDNR- Fisheries Division and MDNR-Parks and Recreation Division personnel removed the Jonesville Dam on the upper St. Joseph River during January 2011. Also in 2011, the Watervliet Dam on the Paw Paw River was removed with funding from National Oceanic and Atmospheric Administration, USFWS, MDNR and Berrien County. This immediate success should serve as an impetus for similar projects. Owners of high priority dams should be contacted to determine interest in dam removal or modification and county road commissions should be contacted to identify projects for collaboration. Project partners can then begin estimating costs for needed work and identifying possible funding opportunities.

An intensive effort was put forth to prioritize field inventory work and to visit as many sites as possible. Despite this effort, work remains to ensure a complete inventory exists for the St. Joseph River Watershed. Specifically, an attempt should be made with local organizations to confirm that the dams assumed to be removed or that could not be found, do not actually still exist, and the remainder of the dams on the list of 85 that have not been visited in the field, while lower in priority, should be field inspected to determine possibility of removal.

Local organizations could also work to complete the culvert inventories, especially in the subwatersheds in which a priority dam is recommended for removal. This would be valuable information as partners proceed with dam removal projects.

Lessons Learned

Major discrepancies were found between existing data sets and actual field conditions. Many dams in the databases no longer exist or failed long ago. As well, in several instances, dam locations were found to differ from coordinates listed in the databases. A mobile aerial mapping application was found to be critical to locate dams in the field, by searching aerial photographs for the structure, or the impoundment that it creates.

Table 1. Dams Presented to Committee for Review

Name	Stream	State	Date Built	Owner	Head (ft)	Surface acres	Average Depth (ft)
Headwaters							
Baw Beese Lake Control	St. Joseph River	MI	1837	City	12	11	1.8
Hillsdale College Dam	St. Joseph River	MI		College	3	2	0
Lewis Emery County Park #2	St. Joseph River tributary	MI	1934	County	8	47	3.2
Lewis Emery County Park #3	St. Joseph River tributary	MI		County			
Lewis Emery County Park #4	St. Joseph River tributary	MI		County			
Lewis Emery County Park #5	St. Joseph River tributary	MI		County			
Lewis Emery County Park #6	St. Joseph River tributary	MI		County			
Lake Bel Air Control	Beebe Creek	MI	1966	Private	8	103	4
Jonesville Millpond Dam	St. Joseph River	MI	1872	City	7	35	2.6
Litchfield Dam	St. Joseph River	MI	1846	City	5	13	2
Loveless Dam	No Name Creek	MI	1972	Private	6	1	14
Randall Milling Dam	St. Joseph River	MI	1836	Private	5	20	2
Mc Gee Dam	St. Joseph River	MI	1957	Private	5	1	0
Upper							
Coldwater Lake Control	Coldwater River	MI	1962	County	1	1610	0
Rose Lake Control	Betts Drain	MI	1959	County	1	355	0
Little Rose Lake Dam	Little Rose Lake outlet	MI	1960	County	2	14	0.9
Marble Lake Dam	Coldwater River	MI	1962	County	4	780	2.5
Randalls Dam	Coldwater River	MI					
Blackhawk Dam	Coldwater River	MI	1830	County	13	200	5.1
Hog Creek Dam	Hog Creek	MI		County	2	386	0.3
Union Lake (Riley Dam)	St. Joseph River	MI	1900	City	16	518	6.3
Trine Dam	Otto Drain	MI	1960	Private	6	2	2.5

Table 1. Dams Presented to Committee for Review

Name	Stream	State	Date Built	Owner	Head (ft)	Surface acres	Average Depth (ft)
Briskey Pond Dam	Bowen Creek	MI	1970	Private	1	5	4
Hanchett Lake Control	Hanchett Lake outlet	MI	1967	County	1	25	0.4
Stancer Dam	Coldwater River	MI	1835	Private	3	4	0
Industrial Acres Dam	Coldwater River tributary	MI		County			
Morrison Lake Dam	Coldwater River	MI		Private			
Maxsons Dam	Hog Creek	MI	1875	Private	1	2	0
Sharpe Dam	Hog Creek	MI	1900	Private	2	3	0.7
Hemlock Lake Dam	Hog Creek	MI		County			
Matteson Lake Control	Swan Creek	MI	1966	County	2	256	1
Swan Creek Dam	Swan Creek	MI		County	1	5	0
Lamberson Dam	Swan Creek	MI		City			
Palmer and Long Lake Control	Swan River	MI	1839	City	8	670	3.6
Rearing Pond Dam	St Joseph River tributary	MI		City	1	3	0
Cotton Lake Dam	Cotton Lake outlet	MI		Private			
Athens Dam	Nottawa Creek	MI	1956	City	13	1	2
Nottawa Lake Control	Nottawa Creek	MI	1964	Private	2	138	0.8
Leonidus Roller Mill Dam	Nottawa Creek	MI	1880	Private	9	1	80
Kings Mill Dam	Nottawa Creek	MI	1836	County	8	23	4.8
Beaver Lake Control	Beaver Drain	MI		County	2	166	0.3
Middle							
Three Rivers Dam	St. Joseph River	MI	1917	Private	12	240	15.2
Sturgis Dam	St. Joseph River	MI	1912	City	26	480	13.6
Taylor Dam	Portage Creek	MI		Private	4	42	1.6
Scotts Dam	Scotts Creek	MI	1859	County	15	8	21.3
Cooks Mill Dam	Portage Creek	MI	1870	Private	16	100	1
Sunset Lake	Portage Creek	MI	1850	Private	11	97	3.3
Lee Paper Company Dam	Portage Creek	MI		Private			

Table 1. Dams Presented to Committee for Review

Name	Stream	State	Date Built	Owner	Head (ft)	Surface acres	Average Depth (ft)
Sugarloaf Lake	Sugarloaf Lake outlet	MI	1937	Private	5	1	1
Portage Plant Dam	Portage River	MI	1922	Private	12	81	11.1
Parkville Dam	Portage River	MI		Private	1	1	0
Pollock Dam	Pollocks Pond outlet	MI	1920	Private	6	1	0
No Name	Rocky River	MI		Private	1	5	0
Streater Mill Dam	Rocky River	MI	1840	Private	10	4	5
Pyle Dam	Sheldon Creek	MI	1960	Private	4	1	1
Fox and Bears Dam	Flowerfield Creek	MI	1840	Private	8	5	4
Flowerfield Dam	Flowerfield Creek	MI	1850	City	5	6	5.8
Corey Lake Control	Corey Lake outlet	MI	1974	Private	1	567	0.4
Pleasant Lake Control	Pleasant Lake outlet	MI	1968	Private	2	262	0.8
Clear Lake Control Dam	Clear Lake outlet	MI		County			
Long Lake Control Dam	Long Lake outlet	MI		County			
Mayes Dam	Four County Drain	MI		Private	1	2	0
Kaiser Lake Control	Kaiser Lake outlet	MI		Private	1	89	0
Springs Mill Dam	Kerr Creek	MI		Private	6	4	3
Leverence Dam	Kerr Creek	MI	1920	Private	8	5	0
Harwood Lake Control	Harwood Lake outlet	MI	1932	County	3	129	1.2
Fish Lake	Unnamed	MI					
Perry Dam	Omena Lake outlet	MI	1967	Private	2	2	0
Teeny Tiny Lake Dam	Spring Creek	MI		Private	3	1	1
Lake Templene Dam	Prairie River	MI	1972	Private	14	950	5.5
Sand Lake Control Dam	Sand Lake outlet	MI		County			
Centreville Dam	Prairie River	MI	1890	Private	7	37	2.7
Centreville WW Lagoon Dam	Prairie River tributary	MI		City			
Ovid-Kinderhook WW Lagoon	Prairie River tributary	MI		County			
Brown Lake Dam*	Brown Lake outlet	IN	NA	Private	12		
Jimmerson Lake Dam	Crooked Creek	IN	1945	IDNR	13	305	0

Table 1. Dams Presented to Committee for Review

Name	Stream	State	Date Built	Owner	Head (ft)	Surface acres	Average Depth (ft)
Crooked Lake	Crooked Lake outlet	IN		Private			
Lake Gage	Lake Gage outlet	IN		Private			
Lake George	Crooked Creek	IN	1927	Private	15	538	0
Fawn R. Fishery D.@ Orland	Fawn River	IN		IDNR	10	2	0
Mud Lake* is Brown Lake	Fawn River	IN		Private	14		
Wall Lake	Fawn River	IN		Private			
Greenfield Mills Dam	Fawn River	IN	1835	Private	27	13	0
Fawn River Mill Dam	Fawn River	MI	1830	Private	5	15	3.7
Star Mill Dam	Fawn River	IN		Private	6		
Klinger Lake Control	Fawn River tributary	MI	1969	Private	2	830	0.8
Upper Constantine Dam	Fawn River	MI	1948	Private	9	90	4.5
Fawn River Power Company	Fawn River	?	1830	City	13	100	1.6
Mottville Dam	St. Joseph River	MI	1923	Private	11	487	7.3
Constantine Hydro Dam	St. Joseph River	MI	1873	Private	12	555	5
Hartenstene Dam	Mill Creek	MI	1912	Private	21	69	8.7
Gordon T. Anderson Earthen	Pigeon Creek	IN		Private	18	25	0
Fox Lake	Pigeon Creek	IN		Private			
Silver Lake Control Structure	Silver Lake outlet	IN		IDNR			
Otter Lake (West)	Pigeon Creek	IN		Private			
Lake Of The Woods	Turkey Creek	IN		Private			
Mongo Reservoir Dam	Pigeon River	IN	1920	IDNR	17	73	0
Lake of The Woods	Lake of the Woods outlet	IN					
Big Long Lake	Big Long Lake outlet	IN		Private			
Pretty Lake	Pretty Lake outlet	IN		IDNR			
Big Turkey Lake	Turkey Creek	IN		IDNR			
Nasby Lake Dam	Pigeon River	IN	1925	IDNR	17	40	0
Ontario Millpond Dam	Pigeon River	IN	1920	IDNR	15	100	0

Table 1. Dams Presented to Committee for Review

Name	Stream	State	Date Built	Owner	Head (ft)	Surface acres	Average Depth (ft)
North Twin Lake	North Twin Lake outlet	IN		Private			
Pigeon River Dam, @ Scott?	Pigeon River	IN	out	IDNR			
Shipshewana Lake	Page Ditch	IN		IDNR			
Stone Lake	Stone Lake outlet	IN		Private			
Fish Lake Nr. Scott	Fish Lake outlet	IN		Private			
Adams Lake	Little Elkhart Creek	IN	1952	IDNR			
Cliff Pettit Dam	Little Elkhart Creek	IN		Private	8		
Little Elkhart River Dam	Little Elkhart River	IN		Private			
Birch Lake Control	Birch Lake outlet	MI	1885	Private	1	300	0.4
Birch Lake Millpond Dam	Mud Creek	MI		Private			
Shavehead Lake Control	Mud Creek	MI	1960	County	3	93	2.8
Baldwins Lake Dam	Baldwins Lake outlet	MI		County			
Long Lake Dam	Long Lake outlet	MI		County			
Coverdale Lake Dam	Coverdale Lake outlet	MI		County			
Goshen College Dam	Trout Creek tributary	MI		College			
Lilly Lake Dam	Lilly Lake outlet	MI		County			
Hutchens Lake Dam	Hutchens Lake outlet	MI		County			
Indiana Lake Dam	Indiana Lake outlet	MI		County			
Lower Stamp Dam	Mud Creek	MI	1988	Private	5	2	2
Upper Stamp Dam	Mud Creek	MI	1988	Private	11	1	2
Williamsville Mill Dam	Mud Creek	?	1885	Private	1	7	0
Depa Dam	Sweets Creek	MI	1960	Private	7	14	0
No Name	Trout Creek	?		Private	5	16	0.6
Centennial Mill Dam	Mud Creek	MI	1895	Private	7	13	5.4
Blackman Lake	Adams Lake	IN		Private			
High Lake	Carrol Creek	IN		Private			
Messick Lake	Elkhart River	IN		IDNR			

Table 1. Dams Presented to Committee for Review

Name	Stream	State	Date Built	Owner	Head (ft)	Surface acres	Average Depth (ft)
Rivir Lake Control	Forker Creek	IN		IDNR			
Oliver Lake	Oliver Lake outlet	IN		IDNR			
Bear Lake	Unnamed	IN		IDNR			
Bixler Lake	Bixler Lake Ditch	IN		City			
Skinner Lake	Croft Ditch	IN		IDNR			
Lake Barbara Dam	Elkhart River	IN	1979	Private	11		
Lower Long Lake	Elkhart River	IN		County			
Richard Grieger Lake	Elkhart River	IN		Private			
Latta Lake	Latta Lake outlet	IN		Private			
Marvin Morgan Dam	Offstr-Croft Ditch	IN	1973	Private	18		
Lake Maxler Dam	Round Lake	IN	1964	Private	20	26	0
Sylvan Lake Dam	Sylvan Lake outlet	IN	1837	Private	30		
Little Long Lake	Waterhouse Ditch	IN	1969	Private			
Waldron Lake (West Lakes)	Elkhart River	IN		IDNR			
Flatbelly Lake Dam	Flatbelly Lake outlet	IN	1962	Private	17	3	0
Papakeechee Lake	Papakeechee Lake	IN	1913	Private	10	178	0
Shock Lake Dam	Shock Lake outlet	IN		IDNR	6	35	0
Dewart Lake	Hammond Ditch	IN	1965	Private			
Syracuse Lake	Turkey Creek	IN		City			
Benton Dam	Elkhart River	IN		County	4		
Bainter Town Dam	Elkhart River	IN		County	4		
Bainter Town Hydro Plant	Elkhart River	IN		County	18		
Goshen Pond Dam	Elkhart River	IN	1868	County	16	122	0
Elkhart River Dam	Elkhart River	IN		City	10		
Bonneyville Mill Dam	Elkhart River	IN		County			
Heaton Lake Control	Puterbaugh Creek	IN		Private			
Elkhart Dam	St. Joseph River	IN	1913	Private	28		
Diamond Lake Dam	Christiana Creek	MI	1968	Private	3	680	1.2

Table 1. Dams Presented to Committee for Review

Name	Stream	State	Date Built	Owner	Head (ft)	Surface acres	Average Depth (ft)
	tributary						
Adamsville Mill Dam	Christiana Creek	MI	1865	City	8	398	4
Eagle Lake Level Control	Eagle Lake outlet	MI	1989	Private	2	288	0.8
Lower							
Twin Branch Plant Dam	St. Joseph River	IN	1904	Private	33		
South Bend Dam	St. Joseph River	IN	1930	City	12		
Warton Lake (Goodman)	Unnamed	IN		Private			
Garver Lake Control	Cobus Creek	MI	1959	Private	2	44	0.8
Niles French Paper Dam	St. Joseph River	MI	1887	Private	13	80	6.4
Lake of the Woods Control	Lake of the Woods Drain	MI	1952	County	1	265	0.4
Priest Lake Control	Priest Lake outlet	MI	1974	Private	7	15	4.7
Magician Lake Control	Silver Creek	MI	1964	Private	2	498	0.1
Round Lake Control Dam	Pipestone Creek tributary	MI		County			
N. Twin Lake Dam	Twin Lakes outlet	MI		County			
S. Twin Lake Dam	Twin Lakes outlet	MI		County			
Meyer Dam	Dowagiac Creek	MI	1957	Private		1	0
Finch Lake Control	Dowagiac Creek	MI	1941	County	1	114	0
Gravel Lake Control	Gravel Lake outlet	MI	1950	Private	2	296	0.8
Benedict Mill Dam	Dowagiac Creek	MI	1895	Private	11	7	4.3
LaGrange Lake Dam	Dowagiac Creek	MI	1835	Private	8	600	3.2
Upper Mill Dam	Dowagiac Creek	MI	1970	Private	11	125	5.6
Lower Mill Dam	Dowagiac Creek	MI	1826	City	8	6	5
Fish Lake Dam	Dowagiac Creek	MI		County			
Saddlebag Lake Dam	Saddlebag Lake outlet	MI		County			
McMillan Dam	Dowagiac Creek	MI		County			
Arthur Dodd Roadside Dam	Dowagiac River	MI	1980	County	4		
Graber Dam	Mud Lake Ext Drain	MI	1990	Private	4	2	

Table 1. Dams Presented to Committee for Review

Name	Stream	State	Date Built	Owner	Head (ft)	Surface acres	Average Depth (ft)
Glover Dam	Kimmerlee Creek	MI	1965	Private	4	5	0
Pucker Street Dam	Dowagiac River	MI	1928	City	22	49	11.8
Neib Dam	McKinzie Creek	MI		Private	1	18	0
Buchanan Dam	St. Joseph River	MI	1902	Private	13	300	6.7
McCoy Creek Dam	McCoy Creek	MI	1919	Private	4	2	1.5
Trickett Dam	Painter Creek	MI	1969	Private	8	28	3.3
Berrien Springs Dam	St. Joseph River	MI	1908	Private	24	600	9.2
Fisher Dam	Farmers Creek	MI	1972	Private	1	1	0
Oronoko Lakes Dam	Lemon Creek	MI		Private	1	20	0
Storick Dam	Lemon Creek	MI	1967	Private	6	4	7.5
Andres Dam	Love Creek	MI	1959	Private	1	1	1
Rowe Lake Control	Pipestone Creek	MI	1970	County	3	31	1.2
Andres Dam	Pipestone Creek	MI	1959	Private	8	1	1
Pipestone Lake Dam	Pipestone Creek	MI		County			
Mouth							
Wolf Lake Fish Hatchery	Campbell Creek	MI	1930	MDNRE	6	51	1.1
Almena Dams (6)	Hayden Creek	MI		MDNRE			
Old Masonry Dam	Hayden Creek	MI		MDNRE	7	0	
Arndt Dams (3)	Ritter Creek	MI		Private			
E. W. Fisk Dam	Ritter Creek tributary	MI		Private			
Village Association Dam	Fish Lake tributary	MI		Private			
Vorick Dams (2)	Ritter Creek tributary	MI		Private			
Blocker's Pond Dam	Blocker's Pond outlet	MI	1951	Town.	12	3	4.7
Brandywine Lake Control	Brandywine Creek	MI	1971	Town.	1	70	0.4
Adams Dam	E. Br. Paw Paw River	MI	1946	Private	4	2	0
Maple Lake Dam	S. Br. Paw Paw River	MI	1907	City	17	168	11
Briggs Mill Dam	S. Br. Paw Paw River	MI	1898	City	9	24	0.3
Paw Paw Lumber Dam	E. Br. Paw Paw River	MI	1892	Private	12	3	5

Table 1. Dams Presented to Committee for Review

Name	Stream	State	Date Built	Owner	Head (ft)	Surface acres	Average Depth (ft)
Wasman Dam	Paw Paw River tributary	MI	1860	Private	4	19	1.6
Pugsley Lake Control	Pugsley Lake outlet	MI	1970	Private	3	150	1.2
Reynolds Lake Control	Red Creek	MI	1975	Private	1	123	0.3
Shafer Lake Control	Shafer Lake outlet	MI	1978	Private	1	81	0.4
Heuser Dam	Paw Paw River tributary	MI	1963	Private	1	4	7
Rush Lake Control Dam	Paw Paw River tributary	MI		County			
Van Auken Lake Control	Paw Paw River	MI	1959	County	1	244	0.4
Paw Paw Lake Control	Paw Paw Lake outlet	MI	1979	County	1	900	0
Watervliet Dam	Paw Paw River	MI	1849	Private	8	106	3.2
Hibbard Lake Dam	Hibbard Lake outlet	MI		Private	1	20	0
McCormick Dam	Paw Paw tributary	MI		Private	1	4	0
O'Leary Dam 1	Paw Paw tributary	MI		Private	1	3	0
O'Leary Dam 2	Paw Paw tributary	MI		Private	1	20	0
Schmuhl Dam	Paw Paw River tributary	MI	1958	Private	1	10	3.2
Welch Dam	Paw Paw tributary	MI		Private			
Yellow Creek Dam	Yellow Creek	MI		Private	1	10	0
Total 186 Dams							

Table 2. Dams Reviewed by Committee, with Location Information

Dam Name	Quad24k	Stream	Region	ST	County
A H Randall Milling Dam	Tekonsha MI	St. Joseph River	Headwaters	MI	Calhoun
Adams Dam	Lawton MI	E. Br. Paw Paw River	Mouth	MI	Van Buren
Adamsville Hydroelectric Dam	Adamsville MI	Christiana Creek	Middle	MI	Cass
Almena Hatchery Dam #1	Gobles East	Hayden Creek	Mouth	MI	Van Buren
Almena Hatchery Dam #2	Gobles East	Hayden Creek	Mouth	MI	Van Buren
Almena Hatchery Dam #3	Gobles East	Hayden Creek	Mouth	MI	Van Buren
Almena Hatchery Dam #4	Gobles East	Hayden Creek	Mouth	MI	Van Buren
Almena Hatchery Dam #5	Gobles East	Hayden Creek	Mouth	MI	Van Buren
Andres Dam #1	Sodus MI	Pipestone Creek	Lower	MI	Berrien
Andres Dam #2	Berrien Springs MI	Love Creek	Lower	MI	Berrien
Arndt Dams (3 Dams)	Gobles East	Ritter Creek	Mouth	MI	Van Buren
Arthur Dodd Memorial Roadside Dam	Sumnerville MI	Dowagiac River	Lower	MI	Cass
Athens Dam	Union City MI	Nottawa Creek	Upper	MI	Calhoun
Austin Lake	Portage MI		Middle	MI	Kalamazoo
Bainter Town Dam	Goshen IN	Elkhart River	Middle	IN	Elkhart
Bainter Town Hydro Plant	Goshen IN	Elkhart River	Middle	IN	Elkhart
Baldwins Lake Level Control Structure	Mottville MI	Baldwins Lake outlet	Middle	MI	Cass
Ball Bend Dam	South Bend East IN			IN	
Baw Beese Lake Dam	North Adams MI	St. Joseph River	Headwaters	MI	Hillsdale
Beaver Lake Level Control Structure	Colon MI	Beaver Drain	Upper	MI	St. Joseph
Benton Dam	Goshen IN	Elkhart River	Middle	IN	Elkhart
Berrien Springs Dam	Berrien Springs MI	St. Joseph River	Lower	MI	Berrien
Birch Lake Level Control Structure	Jones MI	Birch Lake outlet	Middle	MI	Cass
Birch Lake Millpond Dam	Mottville MI	Mud Creek	Middle	MI	Cass
Blackhawk Dam	Coldwater West MI	Coldwater River	Upper	MI	Branch
Blocker's Pond Dam	Gobles East	Blockers Pond outlet	Mouth	MI	Van Buren
Brandywine Lake Level Control Structure	Gobles East	Brandywine Creek	Mouth	MI	Van Buren
Briggs Dam	Paw Paw MI	S. Br. Paw Paw River	Mouth	MI	Van Buren

Table 2. Dams Reviewed by Committee, with Location Information					
Dam_Name	Quad24k	Stream	Region	ST	County
Briskey Pond Dam	Allen MI	Bowen Creek	Upper	MI	Hillsdale
Buchanan Dam	Niles West MI	St. Joseph River	Lower	MI	Berrien
Centennial Mill Dam	Mottville MI	Mud Creek	Middle	MI	Cass
Centreville Dam	Three Rivers East MI	Prairie River	Middle	MI	St. Joseph
Clear Lake Level Control Structure	Three Rivers West MI	Clear Lake outlet	Middle	MI	St. Joseph
Cold Springs Mill Dam	Three Rivers West MI	Kerr Creek	Middle	MI	St. Joseph
Coldwater Lake Level Control Structure	California MI	Coldwater River	Upper	MI	Branch
Constantine Hydro Dam	Constantine MI	St. Joseph River	Middle	MI	St. Joseph
Cooks Mill Dam	Adams Park MI	Portage Creek	Middle	MI	Kalamazoo
Corey Lake Level Control Structure	Three Rivers West MI		Middle	MI	Cass
Corey Lake Level Overflow Structure	Three Rivers West MI	Corey Lake outlet	Middle	MI	St. Joseph
Cotton Lake Dam	East Leroy MI	Cotton Lake outlet	Upper	MI	Calhoun
Coverdale Lake	Mottville MI	Coverdale Lake outlet	Middle	MI	Cass
Depa Dam	Mottville MI	Sweets Creek	Middle	MI	Cass
Diamond Lake Dam	Vandalia MI	Christiana Creek tributary	Middle	MI	Cass
Diamond Lake Dam	Jones MI	Christiana Creek tributary	Middle	MI	Cass
E W Fisk Dam	Gobles East	Ritter Creek tributary	Mouth	MI	Van Buren
Eagle Lake Level Control Structure	Edwardsburg MI	Eagle Lake outlet	Middle	MI	Cass
Edwardsburg Dam	Edwardsburg MI		Middle	MI	Cass
Elkhart River Dam	Elkhart IN	Elkhart River	Middle	IN	Elkhart
Fawn River Fishery Dam	Orland IN	Fawn River	Middle	IN	Steuben
Fawn River Mill Dam	Burr Oak MI	Fawn River	Middle	MI	St. Joseph
Fawn River Power Company	Constantine MI	Fawn River	Middle	IN	
Finch Lake Level Control Structure	Decatur MI	Dowagiac Creek	Lower	MI	Cass
Fish Lake	Marcellus MI	Unnamed	Middle	MI	Cass
Fisher Dam	Berrien Springs MI	Farmers Creek	Lower	MI	Berrien
Flatbelly Lake Dam	North Webster IN	Flatbelly Lake outlet	Middle	IN	Kosciusko
Flowerfield	Schoolcraft MI	Flowerfield Creek	Middle	MI	St. Joseph
Fox And Bears Dam	Schoolcraft MI	Flowerfield Creek	Middle	MI	Kalamazoo

Table 2. Dams Reviewed by Committee, with Location Information					
Dam_Name	Quad24k	Stream	Region	ST	County
Garver Lake Level Control Structure	Edwardsburg MI	Cobus Creek	Lower	MI	Cass
Gordon T. Anderson Dam	Hamilton IN	Pigeon Creek	Middle	IN	Steuben
Goshen College Dam	Mottville MI	Trout Creek tributary	Middle	MI	Cass
Goshen Pond Dam	Goshen IN	Elkhart River	Middle	IN	Elkhart
Graber Dam	Dowagiac MI	Mud Lake Ext Drain	Lower	MI	Cass
Gravel Lake Control	Niles West MI		Lower	MI	Branch
Gravel Lake Level Control Structure	Marcellus MI	Gravel Lake outlet	Lower	MI	Berrien
Hanchett Lake Level Control Structure	Coldwater East MI	Hanchett Lake outlet	Upper	MI	Branch
Hartenstene Dam	Constantine MI	Mill Creek	Middle	MI	St. Joseph
Harwood Lake Level Control Structure	Jones MI	Harwood Lake outlet	Middle	MI	Cass
Hemlock, Carpenter, and Long Lake Dam	Allen MI	Hog Creek	Upper	MI	Hillsdale
Heuser Dam	Lawrence MI	Paw Paw River tributary	Mouth	MI	Van Buren
Hillsdale College Dam	North Adams MI	St. Joseph River	Headwaters	MI	Hillsdale
Hillsdale Millpond Dam	Hillsdale MI		Headwaters	MI	Hillsdale
Holmes Hollow Pond	Burr Oak MI	Swan Creek		MI	Branch
Hutchens Lake Level Control Structure	Jones MI	Hutchens Lake outlet	Middle	MI	Cass
Indiana Lake Level Control Structure	Mottville MI	Indiana Lake outlet	Middle	MI	Cass
Industrial Acres Dam #1	Coldwater West MI	Coldwater River tributary	Upper	MI	Branch
Jimmerson Lake Dam	Angola West IN	Crooked Creek	Middle	IN	Steuben
Jonesville Millpond Dam	Hillsdale MI	St. Joseph River	Headwaters	MI	Hillsdale
Kelsey Lake	Dowagiac MI		Middle	MI	Cass
Kings Mill Dam	Leonidas MI	Nottawa Creek	Upper	MI	St. Joseph
Klinger Lake Level Control Structure	Klinger Lake MI	Fawn River tributary	Middle	MI	St. Joseph
LaGrange Lake Dam	Dowagiac MI	Dowagiac Creek	Lower	MI	Cass
Lake Barbara Dam	Merriam IN	Elkhart River	Middle	IN	Noble
Lake Bel-Air Dam	North Adams MI	Beebe Creek	Headwaters	MI	Hillsdale
Lake George Dam	Kinderhook MI	Crooked Creek	Middle	IN	Steuben
Lake of the Woods Level Control Structure	Twin Lakes MI	Lake of the Woods Drain	Lower	MI	Van Buren
Lake Templene Dam	Nottawa MI	Prairie River	Middle	MI	St. Joseph

Table 2. Dams Reviewed by Committee, with Location Information

Dam_Name	Quad24k	Stream	Region	ST	County
Lamberson Dam	Colon MI	Swan Creek	Upper	MI	St. Joseph
Lawrence	Lawrence MI		Middle	MI	Van Buren
Lee Lake	Ellis Corners MI		Upper	MI	Calhoun
Lee Paper Company Dam	Vicksburg MI	Portage Creek	Middle	MI	Kalamazoo
Leonidus Roller Mill Dam	Leonidas MI	Nottawa Creek	Upper	MI	St. Joseph
Leverence Dam	Three Rivers West MI	Kerr Creek	Middle	MI	St. Joseph
Lewis Emery County Park Pond #2 Dam	North Adams MI	St. Joseph River tributary	Headwaters	MI	Hillsdale
Lewis Emery County Park Pond #3 Dam	North Adams MI	St. Joseph River tributary	Headwaters	MI	Hillsdale
Lewis Emery County Park Pond #4 Dam	North Adams MI	St. Joseph River tributary	Headwaters	MI	Hillsdale
Lewis Emery County Park Pond #5 Dam	North Adams MI	St. Joseph River tributary	Headwaters	MI	Hillsdale
Lewis Emery County Park Pond #6 Dam	North Adams MI	St. Joseph River tributary	Headwaters	MI	Hillsdale
Lilly Lake Level Control Structure	Jones MI	Lilly Lake outlet	Middle	MI	Cass
Litchfield Dam	Mosherville MI	St. Joseph River	Headwaters	MI	Hillsdale
Little Rose Lake Dam	Kinderhook MI	Little Rose Lake outlet	Upper	MI	Branch
Long Lake	Mottville MI	Long Lake outlet	Middle	MI	Cass
Long Lake Level Control Structure	Three Rivers West MI	Long Lake outlet	Middle	MI	St. Joseph
Loveless Dam	Hillsdale MI	No Name Creek	Headwaters	MI	Hillsdale
Lower Mill Dam	Dowagiac MI	Dowagiac Creek	Lower	MI	Cass
Lower Stamp Dam	Mottville MI	Mud Creek	Middle	MI	Cass
Lyon Lake	Lyon Lake MI		Upper	MI	Calhoun
Magician Lake Level Control Structure	Sister Lakes MI	Silver Creek	Lower	MI	Van Buren
Maple Lake Dam	Paw Paw MI	S. Br. Paw Paw River	Mouth	MI	Van Buren
Marble Lake Dam	Coldwater East MI	Coldwater River	Upper	MI	Branch
Marvin Morgan Dam	Albion IN	Offstr-Croft Ditch	Middle	IN	Noble
Matteson Lake Level Control Structure	Bronson North MI	Swan Creek	Upper	MI	Branch
Maxsons Dam	Burlington MI	Hog Creek	Upper	MI	Branch
Mayes Dam	Schoolcraft MI	Four County Drain	Middle	MI	St. Joseph
Mc Gee Dam	Burlington MI	St. Joseph River	Headwaters	MI	Calhoun
McCormick Dam	Coloma MI	Paw Paw tributary	Mouth	MI	Berrien

Table 2. Dams Reviewed by Committee, with Location Information					
Dam_Name	Quad24k	Stream	Region	ST	County
McCoy Creek Dam	Niles West MI	McCoy Creek	Lower	MI	Berrien
McMillan Dam	Decatur MI	Dowagiac Creek	Lower	MI	Cass
Meyer Dam	Decatur MI	Dowagiac Creek	Lower	MI	Van Buren
Mongo Reservoir Dam	Mongo IN	Pigeon River	Middle	IN	Lagrange
Morrison West Chain Lake Level Control Structure	Burlington MI	Coldwater River	Upper	MI	Branch
Mottville Dam	Mottville MI	St. Joseph River	Middle	MI	St. Joseph
Nasby Lake Dam	Mongo IN	Pigeon River	Middle	IN	Lagrange
Neib Dam	Niles East MI	McKinzie Creek	Lower	MI	Cass
Niles Dam	Niles West MI	St. Joseph River	Lower	MI	Berrien
No Name	Marcellus MI	Rocky River	Middle	MI	Cass
Nottawa Lake Level Control Structure	Lyon Lake MI	Nottawa Creek	Upper	MI	Calhoun
Old Masonry Dam	Gobles East	Hayden Creek	Mouth	MI	Van Buren
O'Leary Dam #1	Coloma MI	Paw Paw tributary	Mouth	MI	Berrien
Ontario Mill Pond Dam	Lagrange IN	Pigeon River	Middle	IN	Lagrange
Oronoko Lakes Dam	Baroda MI	Lemon Creek	Lower	MI	Berrien
Ovid-Kinderhook WW Treatment Lagoons	Kinderhook MI	Prairie River tributary	Middle	MI	Branch
Papakeechee Lake	Lake Wawasee IN	Papakeechee Lake	Middle	IN	Kosciusko
Parkville Dam	Vicksburg MI	Portage River	Middle	MI	St. Joseph
Paw Paw City Dam	Paw Paw MI	Paw Paw River	Mouth	MI	Van Buren
Paw Paw Lake Level Control Structure	Coloma MI	Paw Paw Lake outlet	Mouth	MI	Berrien
Paw Paw Lumber Co Dam	Paw Paw MI	E. Br. Paw Paw River	Mouth	MI	Van Buren
Perry Dam	Sturgis MI	Omena Lake outlet	Middle	MI	St. Joseph
Pipestone Lake Dam	Sister Lakes MI	Pipestone Creek	Lower	MI	Berrien
Pleasant Lake Level Control Structure	Three Rivers West MI	Pleasant Lake outlet	Middle	MI	St. Joseph
Pollock Dam	Marcellus MI	Pollocks Pond outlet	Middle	MI	Cass
Portage Plant Dam	Three Rivers West MI	Portage River	Middle	MI	St. Joseph
Portage River	Adams Park MI				
Priest Lake Level Control Structure	Sister Lakes MI	Priest Lake outlet	Lower	MI	Cass
Pucker Street Dam	Niles East MI	Dowagiac River	Lower	MI	Berrien

Table 2. Dams Reviewed by Committee, with Location Information					
Dam_Name	Quad24k	Stream	Region	ST	County
Pugsley Lake Level Control Structure	Paw Paw MI	Pugsley Lake outlet	Mouth	MI	Van Buren
Randalls Dam	Union City MI	Coldwater River	Upper	MI	Branch
Rearing Pond Dam	Union City MI	St Joseph River tributary	Upper	MI	Branch
Reynolds Lake Level Control Structure	Lawrence MI	Red Creek	Mouth	MI	Van Buren
Riley Dam	Union City MI	St. Joseph River	Upper	MI	Branch
Rose Lake Level Control Structure	Kinderhook MI	Betts Drain	Upper	MI	Branch
Rowe Lake Level Control Structure	Sodus MI	Pipestone Creek	Lower	MI	Berrien
Saddlebag Lake	Marcellus MI	Saddlebag Lake outlet	Lower	MI	Cass
Sand Lake Level Control Structure	Nottawa MI	Sand Lake outlet	Middle	MI	St. Joseph
Schafer Lake Level Control Structure	Lawrence MI	Shafer Lake outlet	Mouth	MI	Van Buren
Schmuhl Dam	Coloma MI	Paw Paw River tributary	Mouth	MI	Berrien
Scotts Mill Dam	Adams Park MI	Scotts Creek	Middle	MI	Kalamazoo
Sharpe Dam	Burlington MI	Hog Creek	Upper	MI	Branch
Shavehead Lake Level Control Structure	Mottville MI	Mud Creek	Middle	MI	Cass
Silver Lake Level Control Structure	Kinderhook MI	Silver Lake outlet	Middle	IN	Branch
South Bend Dam	South Bend East IN	St. Joseph River	Lower	IN	St. Joseph
Stancer Dam	Burlington MI	Coldwater River	Upper	MI	Branch
Star Milling Dam	Lagrange IN	Fawn River	Middle	IN	Lagrange
Storick Dam	Baroda MI	Lemon Creek	Lower	MI	Berrien
Streater Mill Dam	Jones MI	Rocky River	Middle	MI	Cass
Sturgis Dam	Three Rivers East MI	St. Joseph River	Middle	MI	St. Joseph
Sugarloaf Lake	Portage MI	Sugarloaf Lake outlet	Middle	MI	Kalamazoo
Sylvan Lake Dam	Albion IN	Sylvan Lake outlet	Middle	IN	Noble
Taylor Dam	Adams Park MI	Portage Creek	Middle	MI	Kalamazoo
Teeny Tiny Lake Dam	Colon MI	Spring Creek	Middle	MI	St. Joseph
Three Rivers Dam	Three Rivers East MI	St. Joseph River	Middle	MI	St. Joseph
Trickett Dam	Baroda MI	Painter Creek	Lower	MI	Berrien
Trine Dam	Hillsdale MI	Otto Drain	Upper	MI	Hillsdale
Twin Branch Dam	South Bend East IN	St. Joseph River	Lower	IN	St. Joseph

Table 2. Dams Reviewed by Committee, with Location Information					
Dam_Name	Quad24k	Stream	Region	ST	County
Twin Lakes - North Lake Level Control Structure	Twin Lakes MI	North Twin Lake outlet	Middle	MI	Cass
Twin Lakes - South Lake Level Control Structure	Twin Lakes MI	Twin Lakes outlet	Lower	MI	Cass
Unknown name	Dowagiac MI				
Upper Constantine Dam	Constantine MI	Fawn River	Middle	MI	St. Joseph
Upper Mill Dam	Dowagiac MI	Dowagiac Creek	Lower	MI	Cass
Upper Stamp Dam	Mottville MI	Mud Creek	Middle	MI	Cass
Van Auken Lake Level Control Structure	McDonald MI	Paw Paw River	Mouth	MI	Van Buren
Village Association Dam	Gobles East	Fish Lake tributary	Mouth	MI	Van Buren
Vorick Dams (2 Dams)	Gobles East	Ritter Creek tributary	Mouth	MI	Van Buren
Watervliet Dam	Coloma MI	Paw Paw River	Mouth	MI	Berrien
Welch Dam	Coloma MI	Paw Paw tributary	Mouth	MI	Berrien
Wolcottville Town Dam	Wolcottville IN		Middle	IN	Noble
Wolf Lake Fish Hatchery Dams	Gobles East	Campbell Creek	Mouth	MI	Van Buren
Yellow Creek Dam	Coloma MI	Yellow Creek	Mouth	MI	Berrien

Table 3. Prioritization Scores for Dams Selected for Further Study

Name	Positive Habitat Impact Score				Partner Priority	Cost Score				Social			Total
	Resource Quality	Miles Reconnected	Federal or State T&E, SC or priority species	Subtotal	Subtotal	Structure Size	Structure Age	Pond Size (sediment issues)	Subtotal	Purpose	Pond Size (number of homes)	Subtotal	
Pucker Street Dam	6	6	6	18	6	1	4	6	11	6	6	12	47
Andres Dam	4	2	6	12	6	6	3	6	15	4	6	10	43
McCoy Creek Dam	6	2		8	6	6	5	6	17	5	6	11	42
Parkville Dam	1	6	6	13		6	6	6	18	5	6	11	42
Star Mill Dam	5	4		9	6	4	4.2	6	14.2	6	6	12	41.2
Benton Dam	5	6		11	3	4	6	6	16	3	6	9	39
Elkhart River Dam	5	6	3	14	6	1	4.2	5	10.2	3	5	8	38.2
Leonidus Roller Mill Dam	4	6		10		4	6	6	16	3	6	9	35
Watervliet Dam (removed 2011)	5	6	6	17	6	1	3	1	5	6	1	7	35
Bainter Town Dam	5	2		7	3	4	6	6	16	3	6	9	35
Jonesville Millpond Dam	3	4	6	13	6	1	6	2	9	3	2	5	33
Streater Mill Dam	3	1		4	6	4	6	5	15	3	5	8	33
Meyer Dam	6	2		8		6	3	6	15	4	6	10	33
Storick Dam	4	1		5	6	5	2	5	12	4	5	9	32
Almena Dams (6)	4	2		6		6	4.2	5	15.2	5	5	10	31.2
Adams Dam	6	2		8		5	3	6	14	3	6	9	31
Sharpe Dam	1	3		4		6	5	5	16	5	5	10	30
Stancer Dam	3	5		8		3	6	5	14	3	5	8	30
Paw Paw Lumber Dam	6	2		8		3	6	5	14	3	5	8	30
Andres Dam	6	1		7		4	3	6	13	4	6	10	30
Maxsons Dam	1	1		2		6	6	6	18	4	6	10	30

Table 3. Prioritization Scores for Dams Selected for Further Study

Name	Positive Habitat Impact Score				Partner Priority	Cost Score				Social			Total
	Resource Quality	Miles Reconnected	Federal or State T&E, SC or priority species	Subtotal	Subtotal	Structure Size	Structure Age	Pond Size (sediment issues)	Subtotal	Purpose	Pond Size (number of homes)	Subtotal	
Benedict Mill Dam	6	2		8		5	6	4	15	3	4	7	30
No Name	3	1		4		6	4.2	5	15.2	5	5	10	29.2
Old Masonry Dam	4	1		5		5	4.2	5	14.2	5	5	10	29.2
Randall Milling Dam	3	6		9		3	6	3	12	5	3	8	29
Fox and Bears Dam	2	1		3		4	6	5	15	6	5	11	29
Fisher Dam	4	1		5		6	2	6	14	4	6	10	29
McMillan Dam	6	1		7		4	4.2	5	13.2	3	5	8	28.2
Neib Dam	6	2		8		6	4.2	3	13.2	4	3	7	28.2
Mayes Dam	1	1		2		6	4.2	6	16.2	4	6	10	28.2
Springs Mill Dam	1	2		3		6	4.2	5	15.2	5	5	10	28.2
Pollock Dam	1	2		3		3	4	6	13	6	6	12	28
Mc Gee Dam	3	1		4		5	3	6	14	4	6	10	28
Teeny Tiny Lake Dam	1	1		2		6	4.2	6	16.2	3	6	9	27.2
Fawn R. Fishery D. @ Orland	1	1		2		4	4.2	6	14.2	5	6	11	27.2
Bainter Town Hydro Plant	1	2		3		2	4.2	6	12.2	6	6	12	27.2
Swan Creek Dam	1	2		3		6	4.2	5	15.2	4	5	9	27.2
Litchfield Dam	3	3		6		4	6	3	13	5	3	8	27
Lower Mill Dam	6	1		7		3	6	4	13	3	4	7	27
Leverence Dam	1	1		2		6	4	5	15	5	5	10	27
Pyle Dam	2	2		4		4	2	6	12	5	6	11	27
McCormick Dam	1	1		2		6	4.2	5	15.2	4	5	9	26.2
O'Leary Dam 1	1	1		2		6	4.2	5	15.2	4	5	9	26.2

Table 3. Prioritization Scores for Dams Selected for Further Study

Name	Positive Habitat Impact Score				Partner Priority	Cost Score				Social			Total
	Resource Quality	Miles Reconnected	Federal or State T&E, SC or priority species	Subtotal	Subtotal	Structure Size	Structure Age	Pond Size (sediment issues)	Subtotal	Purpose	Pond Size (number of homes)	Subtotal	
Portage Plant Dam	1	5	6	12		2	4	1	7	6	1	7	26
Fawn River Mill Dam	5	4		9		4	6	3	13	1	3	4	26
Blackhawk Dam	3	3	6	12		2	6	1	9	3	1	4	25
Flowerfield Dam	2	2		4		4	6	4	14	3	4	7	25
Briskey Pond Dam	1	1		2		6	2	5	13	5	5	10	25
Centenial Mill Dam	1	1		2		5	6	3	14	6	3	9	25
Perry Dam	1	1		2		6	2	6	14	3	6	9	25
Loveless Dam	1	2		3		5	2	6	13	3	6	9	25
Heuser Dam	1	1		2		6	2	5	13	5	5	10	25
Williamsville Mill Dam	1	2		3		5	6	4	15	3	4	7	25
Trine Dam	1	1		2		5	2	6	13	3	6	9	24
Graber Dam	1	1		2		6	1	6	13	3	6	9	24
Athens Dam	4	1		5		1	3	6	10	3	6	9	24
Lower Stamp Dam	1	1		2		5	1	6	12	4	6	10	24
Yellow Creek Dam	2	1		3		6	4.2	4	14.2	2	4	6	23.2
Upper Constantine Dam	5	5		10		2	3	1	6	6	1	7	23
Scotts Dam	1	2		3		3	6	4	13	3	4	7	23
Blocker's Pond Dam	2	1		3		4	3	5	12	3	5	8	23
Schmuhl Dam	1	1		2		6	3	4	13	4	4	8	23
Upper Stamp Dam	1	1		2		4	1	6	11	4	6	10	23
Wasman Dam	1	2		3		3	6	3	12	5	3	8	23
No Name	1	1		2		5	4.2	3	12.2	5	3	8	22.2

Table 3. Prioritization Scores for Dams Selected for Further Study

Name	Positive Habitat Impact Score				Partner Priority	Cost Score				Social			Total
	Resource Quality	Miles Reconnected	Federal or State T&E, SC or priority species	Subtotal	Subtotal	Structure Size	Structure Age	Pond Size (sediment issues)	Subtotal	Purpose	Pond Size (number of homes)	Subtotal	
O'Leary Dam 2	1	1		2		6	4.2	3	13.2	4	3	7	22.2
Hartenstene Dam	4	3		7		2	5	1	8	6	1	7	22
Kings Mill Dam	4	4		8		1	6	2	9	3	2	5	22
Lamberson Dam	1	5		6		5		4	9	3	4	7	22
Birch Lake Millpond Dam	1	1		2		3	4.2	4	11.2	4	4	8	21.2
Taylor Dam	1	2		3		6	4.2	2	12.2	3	2	5	20.2
Goshen College Dam	2	1		3		5	4.2	2	11.2	4	2	6	20.2
Fawn River Power Company	5	2		7		2	6	1	9	3	1	4	20
Depa Dam	2	1		3		5	2	3	10	4	3	7	20
Rearing Pond Dam	1	1		2		5		5	10	3	5	8	20
Cliff Pettit Dam	4	1		5		1	4.2	3	8.2	3	3	6	19.2
Adamsville Mill Dam	3	2		5		4	6	1	11	1	1	2	18
Pipestone Lake Dam	6	1		7		1	4.2	1	6.2	3	1	4	17.2
Upper Mill Dam	6	2		8		2	2	1	5	3	1	4	17
Cooks Mill Dam	1	2		3		3	6	1	10	3	1	4	17
Gordon T. Anderson Earthen	1	1		2		3	4.2	2	9.2	3	2	5	16.2
Nasby Lake Dam	3	1		4		1	4	2	7	3	2	5	16
Rivir Lake Control	1	1		2		1	4.2	2	7.2	3	2	5	14.2
Lee Paper Company Dam	1	1		2		1	6	1	8	3	1	4	14
Mongo Reservoir Dam	1	1		2		1	4	1	6	3	1	4	12
85 Total Dams													

Table 4. Results of Culvert Inventory						
Site_ID	Stream_Name	Road_Name	Passability	Type	Lat	Long
BLU1	Blue Creek	Hicks	1	Culvert	42.14471	-86.40806
BLU2	Blue Creek	Red Arrow Hwy	1	Bridge	42.13576	-86.39770
BLU3	Blue Creek	94/31	1	Bridge	42.12753	-86.37860
BLU4	Blue Creek	Territorial	1	Bridge	42.12615	-86.36979
BLU5	Blue Creek	Highland	0.9	Culvert	42.12094	-86.34358
BLU6	Blue Creek	Territorial	0.5	Culvert	42.12165	-86.33804
BLU7	Blue Creek	Park	0	Culvert	42.12647	-86.32098
BLU8	Blue Creek	Park	1	Culvert	42.12388	-86.32092
BLU9	Blue Creek	Park	0	Culvert	42.12161	-86.32089
BLU10	Blue Creek	Territorial	0.5	Culvert	42.11603	-86.30607
CHR1	Christiana	Beardsly Ave	1	Bridge	41.69333	-85.96825
CHR2	Christiana	Railroad	1	Bridge	41.69363	-85.96836
CHR3	Christiana	High Dive Park	0.5	Other	41.69403	-85.96849
CHR4	Christiana	High Dive Park	0	Other	41.69488	-85.96944
CHR5	Christiana	Cassopolis	0	Other	41.69538	-85.97189
CHR6	Christiana	Main St	0	Other	41.69556	-85.97667
CHR7	Christiana	Railroad	0	Other	41.69534	-85.97758
CHR8	Christiana	Botanical Park	0	Other	41.69632	-85.98068
CHR9	Christiana	N Shore	1	Bridge	41.82162	-86.00003
CHR10	Christiana	Robinson	1	Bridge	41.83363	-85.99185
CHR11	Christiana	Mt Zion	0.5	Culvert	41.84687	-85.97649
CHR12	Christiana	Cassopolis	0	Culvert	41.84841	-85.97308
CHR13	Leninger outlet	Cassopolis	0	Culvert	41.85575	-85.97289
CHR14	Christiana	Chain Lakes Rd	1	Bridge	41.86644	-85.95304
CHR15	Cassopolis	Northrop	1	Bridge	41.87105	-85.94959
CHR16	Christiana	Calvin Center	0.5	Culvert	41.87500	-85.93368
CHR17	Christiana	Brownsville	0.5	Culvert	41.88551	-85.92686
CHR18	Paradise outlet	Day Lake	1	Culvert	41.89213	-85.91887
CHR19	Christiana	Jeffries	0.5	Culvert	41.89717	-85.92050
CHR20	Christiana	M60	0.9	Culvert	41.91822	-85.91667
CHR21	Christiana	Quaker	0	Culvert	41.94774	-85.91372
CHR22	Christiana	Hoffman	0.9	Culvert	41.96215	-85.90248
CHR23	lake outlet	White Temple	0.9	Culvert	41.96239	-85.90014
CHR24	Diamond outlet	Crooked Creek	0.5	Culvert	41.87893	-85.95380
CHR25	Christiana	Simonton	1	Bridge	41.69933	-85.98107
CHR26	Christiana	Bristol	1	Bridge	41.70259	-85.98005
CHR27	Christiana	CR6	1	Bridge	41.72437	-85.98496
CHR28	Christiana	CR4	1	Bridge	41.73885	-85.98685
CHR29	Christiana	Redfield	0.5	Culvert	41.76749	-85.99882
FAR1	Farmer Creek	Hipps Hollow	1	Bridge	41.98048	-86.33306

Table 4. Results of Culvert Inventory						
Site_ID	Stream_Name	Road_Name	Passability	Type	Lat	Long
FAWN1	Fawn River	CR130	1	Bridge	41.84601	-85.66431
FAWN2	Fawn River	CR129	1	Bridge	41.83946	-85.64361
FAWN3	Fawn River	CR126	1	Bridge	41.84290	-85.62352
FAWN4	Fawn River	Sevison	1	Bridge	41.83577	-85.60299
FAWN5	Fawn River	Mindale	0.5	Culvert	41.83875	-85.58473
FAWN6	Fawn River	Haybridge	1	Bridge	41.83175	-85.58644
FAWN7	Fawn River	Dickenson	1	Bridge	41.80964	-85.57860
FAWN8	Fawn River	Block	1	Bridge	41.81576	-85.56990
FAWN9	Fawn River	US12	1	Bridge	41.79656	-85.58263
FAWN10	Fawn River	Railroad	1	Bridge	41.79251	-85.58346
FAWN11	Fawn River	Fawn River	1	Bridge	41.78056	-85.58317
FAWN12	Fawn River	600 West	1	Bridge	41.75100	-85.54354
FAWN13	Fawn River	Aldrich	0.5	Culvert	41.76607	-85.54299
FAWN14	Fawn River	450 West	1	Bridge	41.75235	-85.51527
FAWN15	Fawn River	400 West	1	Bridge	41.75631	-85.50592
FAWN16	Fawn River	700 North	0.9	Culvert	41.74273	-85.49344
FAWN17	Fawn River	700 North	0.5	Culvert	41.74288	-85.47903
FAWN18	Fawn River	CR300	0.9	Culvert	41.75000	-85.48586
FAWN19	Fawn River	CR300	1	Culvert	41.74997	-85.48634
FAWN20	Fawn River	Stubey	1	Bridge	41.76376	-85.48646
FAWN21	Fawn River	CR250	1	Bridge	41.76000	-85.47572
FAWN22	Fawn River	CR139	0.5	Culvert	41.76521	-85.46706
FAWN23	Fawn River	Bogen	0.5	Culvert	41.76644	-85.46476
LCN1	Love Creek North	Hipps Hollow	0	Culvert	41.97925	-86.35640
LCN2	Love Creek North	Tabor	0.9	Culvert	42.00013	-86.34017
LCN3	Love Creek North	Hartman	1	Culvert	42.01458	-86.34276
LCN4	Love Creek North	Pipestone	1	Culvert	42.00850	-86.33739
LCS1	Love Creek South	Deans Hill	1	Bridge	41.95162	-86.31719
LCS2	Love Creek South	Huckleberry	0	Culvert	41.95282	-86.29599
LCS3	Love Creek South	Deans Hill	0.5	Culvert	41.95702	-86.29187
LMN1	Lemon Creek	Dairy	1	Culvert	41.96905	-86.36130
LMN2	Lemon Creek	Old US 31	1	Culvert	41.95878	-86.36376
LMN3	Lemon Creek	US31	1	Culvert	41.95015	-86.37581
LMN4	Lemon Creek	Red Bud Trail	0	Culvert	41.94953	-86.37861
LMN5	Lemon Creek	Garr	1	Culvert	41.94817	-86.39813
LMN6	Lemon Creek	Burgoyle	0	Culvert	41.94639	-86.41771
PIP1	Pipestone Creek	River	1	Bridge	42.06082	-86.40153
PIP2	Pipestone Creek	Pipestone	1	Bridge	42.05999	-86.38972
PIP3	Pipestone Creek	Hillendale	1	Bridge	42.06519	-86.35876
PIP4	Pipestone Creek	Merry	0.5	Culvert	42.06332	-86.34908
PIP5	Pipestone Creek	Union	0.5	Culvert	42.06519	-86.34819

Table 4. Results of Culvert Inventory						
Site_ID	Stream_Name	Road_Name	Passability	Type	Lat	Long
PIP6	Pipestone Creek	Union	0.5	Culvert	42.06515	-86.34493
PIP7	Pipestone Creek	Fairview	0.9	Culvert	42.06535	-86.33934
PIP8	Pipestone Creek	Watson	1	Bridge	42.05786	-86.35471
PIP9	Pipestone Creek	Dohm	1	Culvert	42.04967	-86.34988
PIP10	Pipestone Creek	Naomi	1	Bridge	42.04343	-86.33358
PIP11	Pipestone Creek	Park	1	Bridge	42.03513	-86.32829
PIP12	Pipestone Creek	Hochburger	1	Bridge	42.02770	-86.31010
PIP13	Pipestone Creek	Old Pipestone	1	Bridge	42.03137	-86.30042
PIP14	Pipestone Creek	Naomi	1	Bridge	42.04304	-86.28455
PIP15	Pipestone Creek	Bailey	1	Bridge	42.04952	-86.28100
PIP16	Pipestone Creek	Harner	1	Bridge	42.05323	-86.27131
PIP17	Pipestone	M140	1	Bridge	42.06095	-86.26176
YLW1	Yellow Creek	Scottsdale/31	0	Culvert	42.05369	-86.43634
YLW2	Yellow Creek	M63	1	Culvert	42.04430	-86.44027
YLW3	Yellow Creek	Marquette Woods	1	Culvert	42.02924	-86.44005
YLW4	Yellow Creek	Tilley	1	Culvert	42.01932	-86.44495
YLW5	Yellow Creek	John Beers	1	Culvert	42.01462	-86.45106
YLW6	Yellow Creek	Hollywood	1	Culvert	42.00833	-86.45599
YLW7	Yellow Creek	Rocky Weed	1	Culvert	42.00016	-86.46077
YLW8	Yellow Creek	Hollywood	0.5	Culvert	41.99289	-86.45600

Table 5. Highest Priority Crossings						
Site_ID	Stream_Name	Road_Name	Passability	Type	Lat	Long
BLU7	Blue Creek	Park	0	Culvert	42.12647	-86.32098
BLU9	Blue Creek	Park	0	Culvert	42.12161	-86.32089
CHR4	Christiana	High Dive Park	0	Other	41.69488	-85.96944
CHR5	Christiana	Cassopolis	0	Other	41.69538	-85.97189
CHR6	Christiana	Main St	0	Other	41.69556	-85.97667
CHR7	Christiana	Railroad	0	Other	41.69534	-85.97758
CHR8	Christiana	Botanical Park	0	Other	41.69632	-85.98068
CHR12	Christiana	Cassopolis	0	Culvert	41.84841	-85.97308
CHR13	Leninger outlet	Cassopolis	0	Culvert	41.85575	-85.97289
CHR21	Christiana	Quaker	0	Culvert	41.94774	-85.91372
LCN1	Love Creek North	Hipps Hollow	0	Culvert	41.97925	-86.35640
LCS2	Love Creek South	Huckleberry	0	Culvert	41.95282	-86.29599
LMN4	Lemon Creek	Red Bud Trail	0	Culvert	41.94953	-86.37861
LMN6	Lemon Creek	Burgoyle	0	Culvert	41.94639	-86.41771
YLW1	Yellow Creek	Scottsdale/31	0	Culvert	42.05369	-86.43634

Appendices (On CD)

- Appendix 1. Culvert Assessment Data Form
- Appendix 2. Dam Assessment Data Form
- Appendix 3. Culvert Maps, Completed Assessment Data Forms and Photographs
- Appendix 4. Dams, Completed Assessment Data Forms and Photographs
- Appendix 5. Interactive Mapping Application of Dam and Culvert Inspection Map for Use with ESRI ArcReader Software. Map includes Hyperlink from Culvert and Dam Point Locations to Inspection Reports