BEFORE THE POLLUTION CONTROL BOARD
OF THE STATE OF ILLINOIS

CITY OF QUINCY, an Illinois municipal corporation, Petitioner,	)	
v.	)	PCB No. 08-86 (NPDES Permit Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Respondent.	)	

NOTICE OF FILING

To: James Therriault, Clerk
Illinois Pollution Control Board
James R. Thompson Center
Suite 11-500
100 West Randolph Street
Chicago, IL 60601-3218

Carol Webb
Hearing Officer
Illinois Pollution Control Board
1021 North Grand Avenue East
P.O. Box 19274
Springfield, IL 62794-9274

Thomas Davis
Division of Legal Counsel
Illinois Attorney General's Office
500 South Second Street
Springfield, IL 62706

On October 5, 2009, the Hearing Officer advised Petitioner's counsel that the Board requested that Petitioner file two color copies of photographs, charts, etc., found within pages 304-331 (September 11, 2007, CDM Memo) and pages 338-359 (September 21, 2007, CDM Memo) of the Record.

Accordingly, two color copies of the September 11, 2007, CDM Memo and the September 21, 2007, CDM Memo are attached hereto.

CITY OF QUINCY, an Illinois municipal corporation, Petitioner

By Joel A. Benoit
Joel A. Benoit

MOHAN, ALEWELT, PRILLAMAN & ADAMI
1 N. Old Capitol Plaza, Ste. 325
Springfield, IL 62701
Telephone: 217/528-2517
Facsimile: 217/528-2553

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of this Notice of Filing, together with two color copies of the September 11, 2007, CDM Memo and the September 21, 2007, CDM Memo, were today served upon the Illinois Pollution Control Board by enclosing the same in an envelope with postage fully prepaid, and by depositing said envelope in a U.S. Post Office Mailbox in Springfield, Illinois on the 9th day of October, 2009.

James Therriault, Clerk
Illinois Pollution Control Board
James R. Thompson Center
Suite 11-500
100 West Randolph Street
Chicago, IL 60601-3218

and a true and correct copy of this Notice of Filing, without copies of the September 11, 2007, CDM memo and the September 21, 2007, CDM Memo, was today served upon the hearing officer and counsel of record by enclosing the same in envelopes addressed to such attorneys and to said hearing officer with postage fully prepaid, and by depositing said envelopes in a U.S. Post Office Mailbox in Springfield, Illinois on the 9th day of October, 2009.

Thomas Davis
Division of Legal Counsel
Illinois Attorney General's Office
500 South Second Street
Springfield, IL 62706

Carol Webb
Hearing Officer
Illinois Pollution Control Board
1021 North Grand Avenue East
P.O. Box 19274
Springfield, IL 62794-9274

Joel A. Benoit

MOHAN, ALEWELT, PRILLAMAN & ADAMI
1 N. Old Capitol Plaza, Ste. 325
Springfield, IL 62701
Telephone: 217/528-2517
Facsimile: 217/528-2553

THIS FILING IS SUBMITTED ON RECYCLED PAPER

C:\Mapa\Quincy\Not Filing color copies.wpd/crk 10/9/09 4:12 pm

MEMORANDUM

To: *David Kent, City of Quincy*

From: *Ronald French*

Date: *11 September 2007*

Subject: *Primary Recreation Contact Survey for Curtis Creek and Whipple Creek, City of Quincy, Illinois*

INTRODUCTION

The City of Quincy has received a Draft NPDES permit (IL0030503) from the Illinois Environmental Protection Agency (IEPA) that describes three CSO outfalls (002, 006, and 007) as discharging to sensitive areas. Prior to this draft permit, IEPA had consistently found that these three CSO outfalls did not discharge to sensitive areas. The waterbodies in question are as follows:

- Curtis Creek downstream South Side CSO Outfall 002 discharge
- Cedar Street CSO Outfall 006 discharging to Quincy Bay
- Whipple Creek downstream CSO Outfall 007 discharge

Responding to the City of Quincy's request for an explanation, the IEPA stated that it believed these waterbodies to be suitable for primary contact recreation because they flow through residential areas or public use areas that have a high probability for primary contact activity (IEPA letter dated August 28, 2007). However, based upon our investigation and our experience in such matters, it is our opinion that none of these waterbodies have a high probability for primary contact activity, nor do any of them contain any of the features that would qualify them as "sensitive areas."

Primary contact use is defined as *"any recreational or other water use in which there is prolonged and intimate contact with the water [where the physical configuration of the water body permits it] involving considerable risks of ingesting water in quantities sufficient to pose a significant health hazard, such as swimming or water skiing."* (35 Ill. Adm. Code 301.355). A water body that is designated as primary contact is protected under the Illinois General Use Standards (35 Ill. Adm. Code Part 302, Subpart B).

To assess primary contact use in streams in rivers, IEPA uses fecal coliform bacteria from water samples collected from a waterbody to determine if the water quality standard for fecal coliform bacteria is being met. 35 Ill. Adm. Code 302.209 states that *"During the months May through October, based on a minimum of five samples taken over not more than a 30 day period, fecal coliform shall not exceed a geometric mean of 200 per 100 ml, nor shall more than 10% of the samples during any 30 day period exceed 400 per 100 ml in protected waters. Protected waters*

are defined as waters which, due to natural characteristics, aesthetic value or environmental significance are deserving of protection from pathogenic organisms. Protected waters will meet one or both of the following conditions: (1) presently support or have the physical characteristics to support primary contact; (2) flow through or adjacent to parks or residential areas.

However some stream segments may be exempt from the fecal coliform bacteria standard. 35 Ill. Adm. Code 302.209 further defines *"Waters unsuited to support primary contact uses because of physical, hydrologic or geographic configuration and are located in areas unlikely to be frequented by the public on a routine basis as determined by the Agency at 35 Ill. Adm. Code 309.Subpart A, are exempt from this standard."*

METHODS

To determine if the above situation applies to the sensitive areas defined in the City's Draft NPDES permit, a stream assessment survey was conducted of Whipple Creek and Curtis Creek to determine if primary contact uses were occurring and if not what were the limiting factors that prevent the attainment of that use. On August 20th representatives from CDM and Klingner & Associates, P.C. conducted a preliminary tour of CSO Outfalls 002, 006, and 007 to develop a study approach to identifying existing uses downstream of the CSO discharges. Under CDM's direction, a more detailed stream assessment was conducted on August 23 (Whipple Creek) and August 28 (Curtis Creek) by representatives from Klingner.

Attachment A to this report is an example field data sheet that the field crew completed while conducting the stream assessment. Key metrics to be evaluated were water depth, wetted stream width, visible signs of recreation (e.g. swimming), access to the site and proximity of residential and park areas. Sampling locations (T-_) were spaced 300 feet apart, starting upstream of the CSO discharge (**Figures 1 and 2**). At each sampling location, a transect was placed across the stream, and depth measurements were taken at three equally distributed locations across the transect.

RESULTS

Whipple Creek

Approximately 3,330 feet of stream from the CSO discharge point to the confluence of Cedar Creek was surveyed in this study. Wetted stream width in Whipple Creek downstream of the CSO discharge, ranged from 1 to 18 feet, with the average stream width being 8.8 feet (**Table 1**). Depths in Whipple Creek ranged from 0 to 4.8 inches, with the average depth at 1.5 inches. Attachment B contains photographs showing stream depths at selected locations in Whipple Creek. The stream bottom consisted mostly of exposed bedrock, with limited areas of cobble and gravel.

Over 95% of the stream bank was rated DIFFICULT for access to the waterbody, and moderate to steep for bank slope. Both stream banks are densely populated by trees and shrubs, the under story composed of herbaceous vegetation dominated by poison ivy (*Toxicodendron radicans*).

Figure 1- Curtis Creek Sampling Transect Locations

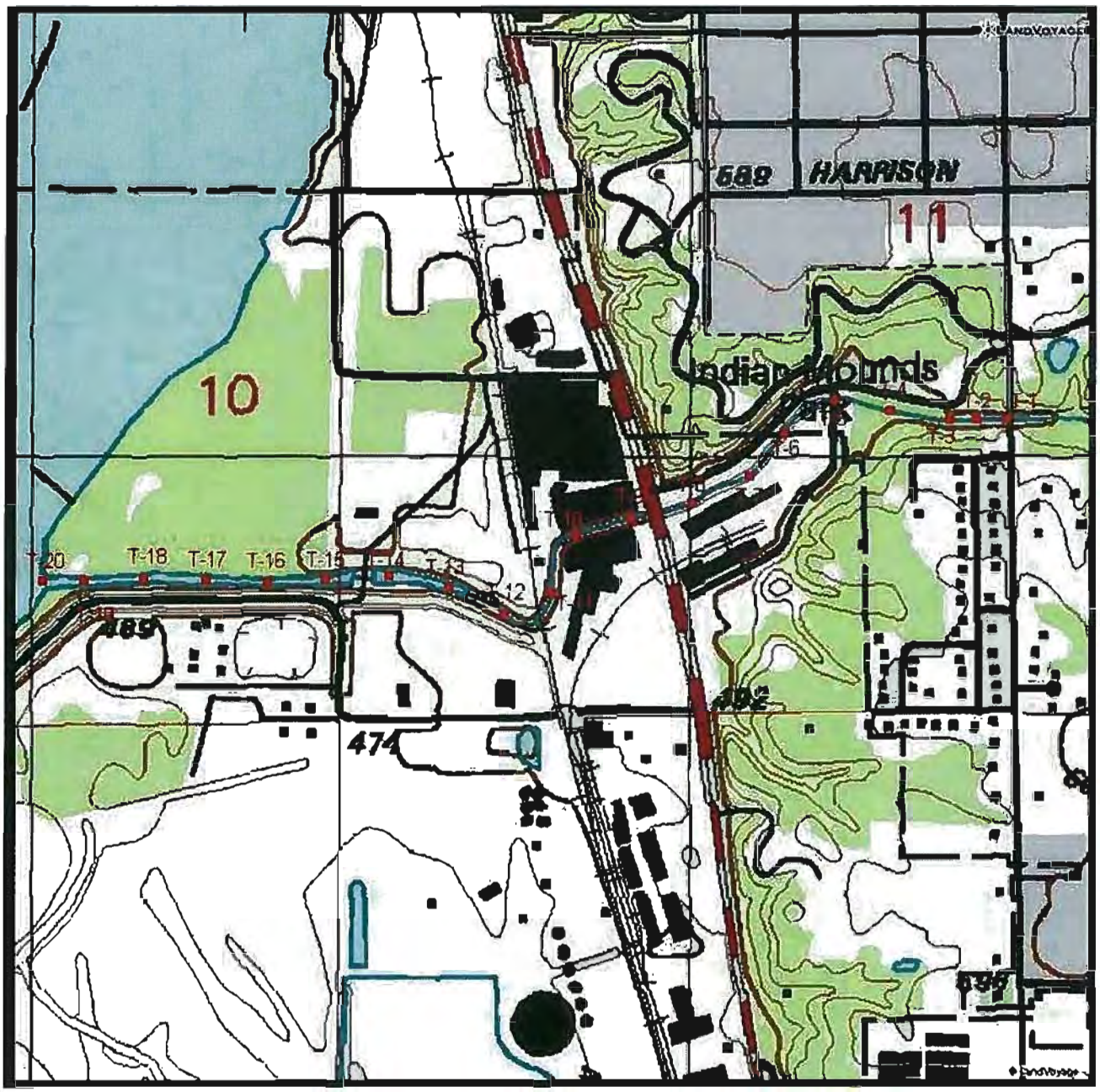


Figure 2- Whipple Creek Sampling Transect Locations

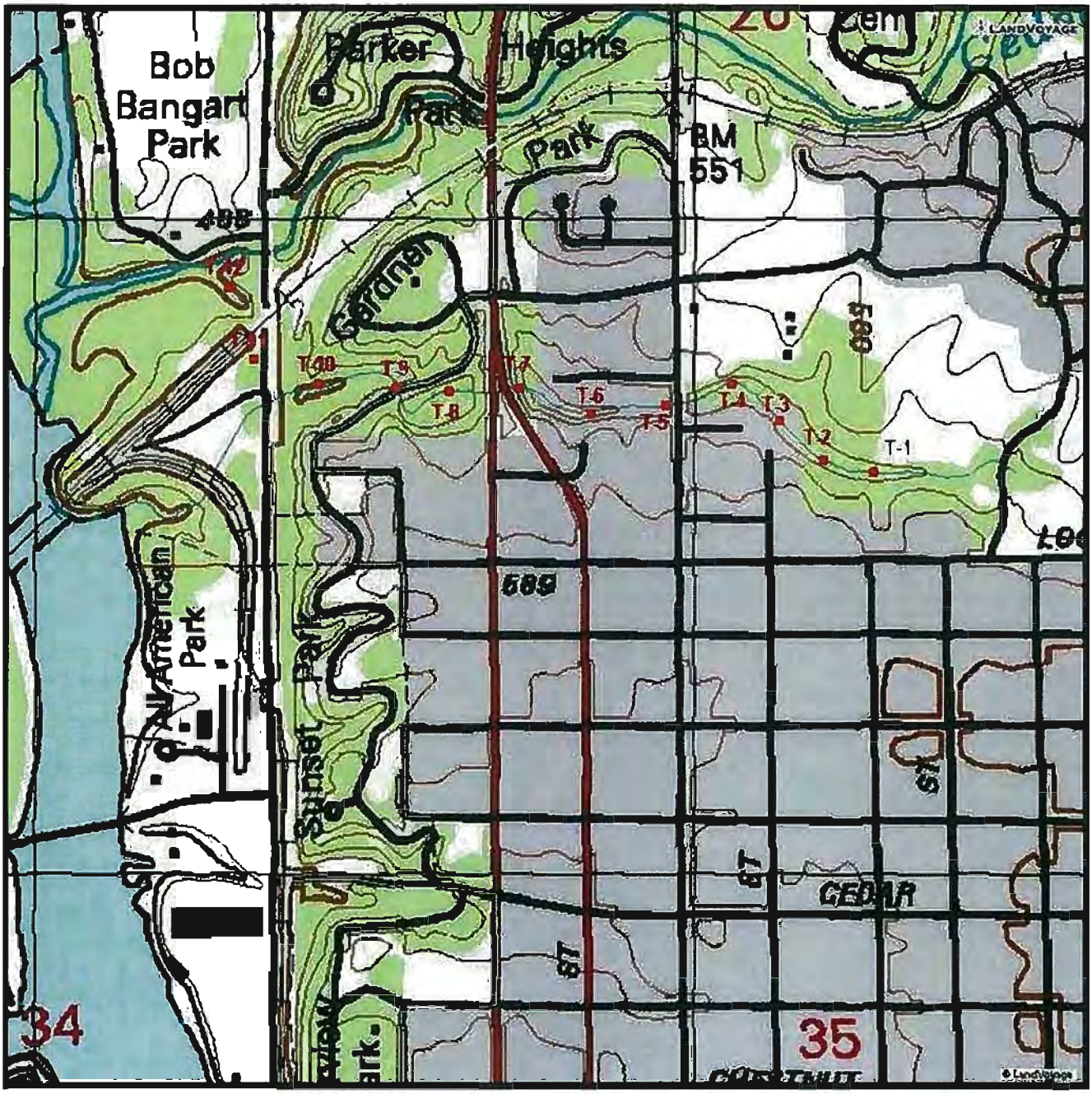


Table 1- Wetted Stream Width and Depth at Each Sampling Transect in Whipple Creek				
Transect Number	Wetted Stream Width (feet)	Transect A Stream Depth (inches)	Transect B Stream Depth (inches)	Transect B Stream Depth (inches)
T-1	1.0	0.6	1.2	0.6
T-2	3.0	0.6	1.2	0.6
T-3	0.0	0.0	0.0	0.0
T-4	0.0	0.0	0.0	0.0
T-5	7.0	0.6	1.2	0.6
T-6	10.0	2.4	4.8	2.4
T-7	0.0	0.0	0.0	0.0
T-8	11.0	1.2	3.6	1.2
T-9	10.0	0.6	1.2	0.6
T-10	11.0	1.2	3.6	1.2
T-11	8.0	0.6	2.4	0.6
T-12	18.0	1.2	2.4	1.2

No visual evidence of recreation activity (swimming, wading, etc) past or present was observed in the creek during the survey. Past recreational activity was identified by looking for rope swings over the water, paths or trails to the creek or the presence of bait containers and "Y" sticks used for fishing. The creek is not deep enough or provides sufficient flow to support recreational watercraft such canoes, kayaks and powerboats. No established beaches or public access points to the creek were present along Whipple Creek. Along with not supporting primary contact recreation, Whipple Creek has not been designated an Outstanding National Resource Water. It does not contain threatened or endangered species, has no public water intake structures and contains no shellfish beds.

Curtis Creek

Approximately 5,900 feet of Curtis Creek was surveyed in this study, starting just upstream of the CSO Outfall 002 to the confluence with the Mississippi River. The wetted stream width ranged from 7 to 60 feet, with the average width being 31.5 feet (**Table 2**).

Table 2- Wetted Stream Width and Depth at Each Sampling Transect in Curtis Creek				
Transect Number	Wetted Stream Width (feet)	Transect A Stream Depth (inches)	Transect B Stream Depth (inches)	Transect B Stream Depth (inches)
T-1	40.0	1.2	1.2	1.2
T-2	42.0	18.0	12.0	18.0
T-3	38.0	9.6	9.6	9.6
T-4	34.0	2.4	2.4	2.4
T-5	8.0	3.6	1.8	9.6
T-6	13.0	4.8	6.0	4.8
T-7	13.0	3.6	2.4	3.6
T-8	22.0	8.4	9.6	7.8
T-9	7.0	6.0	4.2	4.2
T-10	21.0	19.2	19.2	16.8
T-11	37.0	26.4	34.8	49.2
T-12	40.0	N/A	N/A	N/A
T-13	N/A	N/A	N/A	N/A
T-14	35.0	N/A	N/A	N/A
T-15	60.0	N/A	N/A	N/A
T-16	55.0	N/A	N/A	N/A
T-17	50.0	N/A	N/A	N/A
T-18	35.0	N/A	N/A	N/A
T-19	40.0	N/A	N/A	N/A
T-20	40.0	N/A	N/A	N/A

N/A= Not Available- Water conditions were high and unsafe to access due to backflow from the Mississippi River

Depths in Curtis Creek ranged from 1.2 to 49.2 inches in those sections of the creek that could be measured. Back flow from the Mississippi River due to high flows, backed up into the lower portions (T-12 through T-20) of Curtis Creek, making it unsafe to collect depth measurements. Attachment C shows photographs depicting stream depths and widths at various transects in the creek.

Over 98% of the stream bank in the upper reaches was rated DIFFICULT for access to the waterbody, and moderate to steep for bank slope. The lower portions of the creek flow through an industrial area with concrete bank walls and is channelized until the confluence with the Mississippi River. In the upper reaches, stream banks were densely populated by trees and shrubs making access to the creek difficult. As observed on Whipple Creek, the under story is composed of herbaceous vegetation dominated by poison ivy. No visual evidence of recreation activity (swimming, wading, etc) past or present was observed in Curtis Creek during the survey.

Past recreational activity was identified by looking for rope swings over the water, paths or trails to the creek or the presence of bait containers and "Y" sticks used for fishing. The upper half of Curtis Creek is not deep enough or provides sufficient flow to support recreational watercraft such canoes, kayaks, and powerboats. No established beaches or public access points to the creek were present along Curtis Creek. Along with not supporting primary contact recreation, Curtis Creek has not been designated an Outstanding National Resource Water, does not contain threatened or endangered species, has no public water intake structures and contains no shellfish beds.

DISCUSSION

The United States Environmental Protection Agency (EPA) Combined Sewer Overflow (CSO) Control Policy states (Federal Register Vol. 59, No.75, 1994) that *"...a permittee's long-term control plan to give the highest priority to controlling overflows to sensitive areas."* Sensitive areas as defined by EPA include:

- Outstanding National Resource Waters
- National Marine Sanctuaries
- Waters with threatened or endangered species and their habitat
- Waters with primary contact recreation
- Public drinking water intakes or their designated protection areas; and,
- Shellfish beds

Both Whipple Creek and Curtis Creek were evaluated to determine if they contained any of the features identified above, with particularly emphasis on "waters with primary contact recreation".

The two surveys that were conducted by Klingner and Associates, under CDM's direction showed that none of the criteria that define a "sensitive area" were found in Whipple and Curtis Creeks. Primary contact recreation was not observed in these two creeks during the survey, and as shown in **Tables 1 and 2**, water depth is not deep enough (excluding the lower reaches of Curtis Creek) to support swimming or any other water activity that would result in full body immersion. Residential areas along Curtis Creek are limited to a few homes located about several hundred feet from the CSO outfall (**Figure 3**). Access to Curtis Creek in the upper reaches is difficult due to the steep banks and heavily vegetated stream banks. The lower portion of the creek is channelized and lined with concrete in selected locations. The lower reach before the confluence with the Mississippi River has steep banks that are densely vegetated with trees and shrubs. Public access to this portion of Curtis Creek is restricted by the dense vegetation and steep banks. Based upon the physical and hydrologic configuration of the stream channel to support primary contact recreation, the probability that the stream is accessed by the public on a routine basis is low.

Although Whipple Creek flows by several residential areas in its upper reaches (**Figure 4**), access to the creek is very difficult. Stream banks are steep and densely covered with vegetation, and at most sites the under story is dominated by poison ivy. There is low probability that individuals from the residential areas are visiting or recreating in the creek on a routine basis.

Based upon the recent use survey and the physical obstacles that prevent access to the two creeks, primary contact recreation is not an existing use. Although IEPA now states that there is a high probability of primary contact activity, this statement alone, which contradicts its previous findings, cannot support its conclusion that the streams in question can be designated "primary contact recreation" streams, particularly in light of all evidence to the contrary. Recently, IEPA has proposed new standards for the Chicago Area Waterway System (CAWS) through a Use Attainability Analysis approach (www.chicagoareawaterways.org) in a Draft Report (November 2004). Although the CAWS are adjacent to numerous residential areas and parks, and the water depth is sufficient to support swimming and waterskiing, IEPA and the stakeholder group determined that primary contact recreation was not an existing or potential use and therefore certain general use water quality standards do not apply. Instead new use designations and water quality standards are being proposed by IEPA for the CAWS.

CSO Outfall 006, Discharging into the Mississippi River

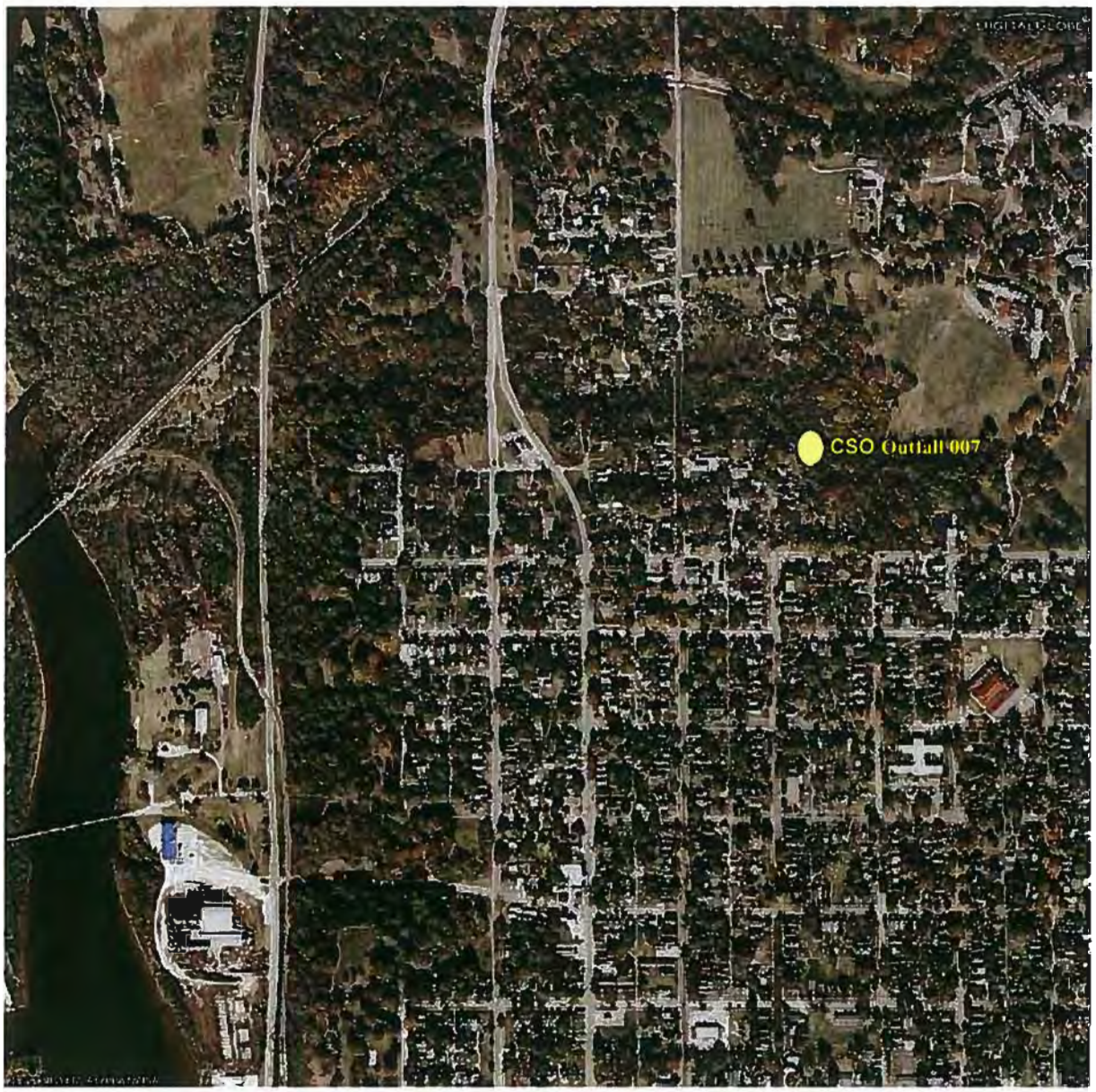
With regard to CSO Outfall 006 discharging to a sensitive area in Quincy Bay, it should be noted that Quincy Bay is not a designated waterway and is only a backwater channel of the Mississippi River. Therefore, it should be corrected in the City's NDPES Permit that the receiving water is the Mississippi River. There is no known water supply intake in the vicinity of CSO Outfall 006 and primary contact recreation has not been observed in the Quincy Bay portion of the Mississippi River. There are several public boat launches and several parks along this portion of the river, but the physical limitations of the waterway itself may prevent primary contact recreation from occurring. Physical limitations include rip-rap banks, deep sediments and unstable bottoms. There is a no-wake policy on this portion of the waterway, therefore waterskiing would not be a recreational activity likely to occur. Based upon the presence of boat launches and several marinas, recreational navigation would be the existing use on this portion of the Mississippi River. There are no known shellfish beds downstream of CSO Outfall 006.

RECOMMENDATIONS

Several communities along the Mississippi River have completed or are developing their CSO long-term control plan (LTCP). Since the City of Quincy is in the process of developing their LTCP, and one of the components of this process is to identify sensitive areas, the City should request that IEPA remove the sensitive area designation from its draft permit until the LTCP is completed. If evidence surfaces during the LTCP process which suggests a change to the designation of any of these waterbodies, this information would be thoroughly evaluated and, if necessary, the change made, as part of the LTCP.

Figure 3- Curtis Creek Drainage Area Downstream of CSO Outfall 002

FIGURE 4- Whipple Creek Drainage Area Downstream of CSO Outfall 007



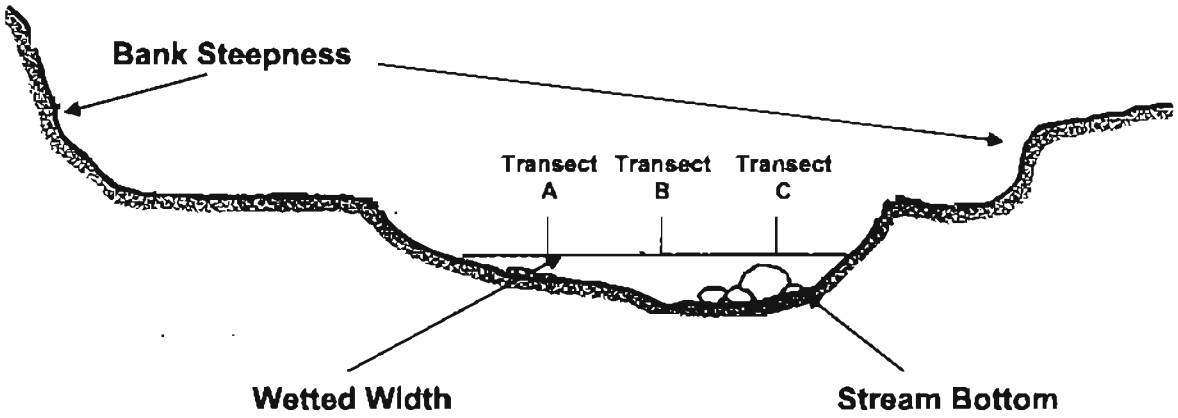
ATTACHMENT A- Field Data Sheets

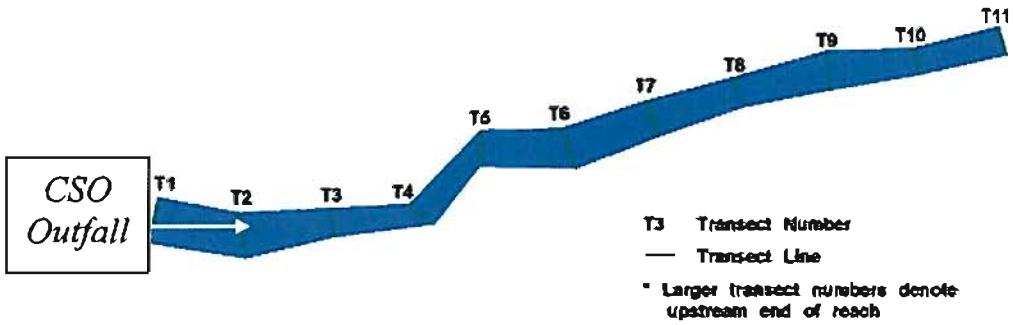
Field Sheet for Determining Primary Contact Suitability

Waterbody: _____ Date: _____ Name of Observer(s): _____
Weather Conditions:_____ Time:_____
Describe Location:_____
Transect Number **T-**_____
Transect Location (GPS coordinates) _____

Parameter to Measure	**Transect Location**	***insert or circle appropriate value***
Stream Bottom	A- Transect Point	bedrock, boulder, cobble, gravel, sand
	B- Transect Point	bedrock, boulder, cobble, gravel, sand
	C- Transect Point	bedrock, boulder, cobble, gravel, sand
Stream Width (feet)	Wetted Stream Width	_____
Stream Depth (inches)	A- Transect Point	_____
	B- Transect Point	_____
	C- Transect Point	_____
Vegetation at Top of Bank	Right Bank	trees, shrubs, weeds, grass, lawn, crop
	Left Bank	trees, shrubs, weeds, grass, lawn, crop
Stream Velocity		slight (few to no riffles) moderate (balance of pools & riffles) high (primarily riffles)
Bank Slope	Right Bank	0.3 slight (3:1 or less) 0.6 moderate (> 3:1 but < 1:1.1) 1.0 steep (1:1 to vertical)
	Left Bank	0.3 slight (3:1 or less) 0.6 moderate (> 3:1 but < 1:1.1) 1.0 steep (1:1 to vertical)
Access to Site at Transect	Left Bank	easy, moderate, difficult
	Right Bank	easy, moderate, difficult
Water Clarity	Visual Observation	Clear, murky, silty, turbid

Photographs (digital and record photograph number):
Looking Upstream of Transect_____
Looking Downstream of Transect_____
Photograph of Measuring Rod at Transect B_____
Photograph of Right Bank_____ Photograph of Left Bank_____


Bank Steepness
Transect A
Transect B
Transect C
Wetted Width
Stream Bottom


CSO Outfall
T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T3 Transect Number
Transect Line
* Larger transect numbers denote upstream end of reach

Field Notes/Observations:

YES or NO

1) Any observed swimming?_____

2) Any observed wading?_____

3) Any observed water skiing?_____

4) Any rope swings?_____

5) Any bait buckets, worm containers to indicate fishing in the area?_____

6) Any other recreational use of the waterbody?_____ If yes, please identify:

_____

Other Observations or Notes:

ATTACHMENT B- Whipple Creek Photographs

Figure B-1 – CSO Outfall 007 on Whipple Creek (Photo W203)

Figure B-2- Looking Downstream CSO Outfall 007 on Whipple Creek (T-2) (Photo W202)

Figure B-3- Depth Measurement in Whipple Creek at T-2 (Photo W201)

Figure B-4- Whipple Creek Stream Bed at T-3 Looking Downstream (Photo W302)

Figure B-5- Whipple Creek Stream Bed at T-4 Looking Upstream (Photo W401)

Figure B-6- Whipple Creek Stream Bed at T-5, Looking Upstream (Photo W501)

Figure B-7- Whipple Creek Water Depth Just West of 3rd Street (T-8) (Photo W803)

Figure B-8- Whipple Creek Channel – Looking Upstream at T-11 (Photo W1101)

Figure B-9- Whipple Creek Channel – Looking Downstream Stream at T-11 (Photo W1101)

Figure B-10- Whipple Creek Water Depth at T-11 (Photo W1101)

ATTACHMENT C- Curtis Creek Photographs

Figure C- 1- 100 Feet Upstream of CSO Outfall 002 (Photo C203)

Figure C- 2- Curtis Creek Water Depth 100 Feet Upstream of CSO Outfall 002 (Photo C201)

Figure C- 3- Looking Upstream at CSO Outfall 002 (T-3) (Photo C302)

Figure C- 4- 100 Feet Downstream of CSO Outfall 002 (T-3) (Photo W301)

Figure C- 5- Looking Downstream at T-3 (Photo C303)

Figure C- 6- Right Bank at T-3 (Photo C304)

Figure C- 7- Looking Upstream at T-4 on Curtis Creek (Photo C402)

Figure C- 8- Water Depth in Curtis Creek at T-4 (Photo C401)

Figure C- 9- Curtis Creek Streambed at T-5 (Photo C503)

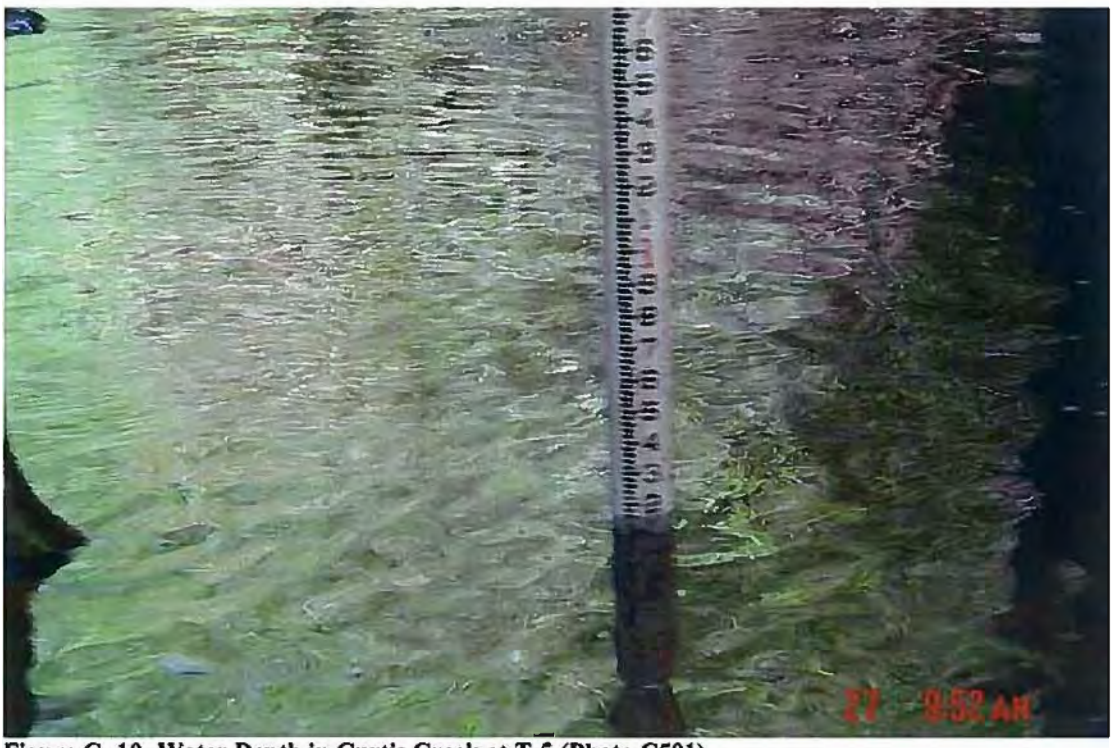


Figure C- 10- Water Depth in Curtis Creek at T-5 (Photo C501)

Figure C- 11- Left Bank of Curtis Creek at T-6 (Photo C605).

Figure C- 12-Curtis Creek Looking Upstream at T-7 (Photo C702)

Figure C- 13- Curtis Creek at Sampling Transect T-8 (Photo C802)

Figure C- 14- Curtis Creek Water Depth at T-8 (Photo C801)

Figure C- 15- Curtis Creek Looking Upstream at T-10 (Photo C1002)

Figure C- 16- Curtis Creek Looking Upstream at T-11 (Photo C1104)

Figure C- 17- Curtis Creek Left Bank at T-15 (Photo C1504)

Figure C- 18- Curtis Creek Channel at T-20 (Photo C2001)

MEMORANDUM

To: *David Kent, City of Quincy*

From: *Ronald French and Donielle Jordan*

Date: *21 September 2007*

Subject: *Recreational Use Survey of Quincy Bay, City of Quincy, Illinois*

INTRODUCTION

In my memo dated 10 September 2007, I discussed the physical surveys conducted on Curtis Creek and Whipple Creek as they relate to potential listing of sensitive areas in the City's Draft NPDES Permit (IL0030503). Quincy Bay, the receiving waters for Cedar Street CSO 006, was also listed as a "sensitive area" in the City's draft permit, but was not fully evaluated during the stream surveys conducted in late August. In July 2007, IEPA identified Quincy Bay as a sensitive area because it could potentially support primary contact recreation.

METHODS

To determine if the above situation applies to Quincy Bay as defined in the City's Draft NPDES permit, a physical and recreational survey was conducted where Cedar Street CSO enters into the Mississippi River (**Figure 1**). When discharging, the Cedar Street CSO flows into the east side of the Mississippi River channel across from Quinsippi Island. This channel is hydraulically connected to the Mississippi River and is not an isolated backwater channel or bay.

The backwater bay called Quincy Bay most likely begins just upstream of the Cedar Creek confluence with the Mississippi River channel and includes an open water and floodplain area of approximately 1,300 acres. The average depth in Quincy Bay is approximately two feet (US Army Corps Map- 27 Aug 2007) and appears to be silting in. Cedar Street CSO outfall is approximately 1,800 feet downstream of Quincy Bay and most likely does not backflow into the bay during discharge events. However, flood events in the Mississippi River could create a backflow situation into Quincy Bay from the Cedar Street CSO when discharging.

On September 18th, representatives from CDM and Klingner & Associates, P.C. conducted a boat survey of the Mississippi River channel from a point immediately north of Cedar Creek to the southern tip of Quinsippi Island (**Figure 2**). An assessment of Art Keller Marina on the western portion of the channel was also conducted. Additionally, representatives from CDM conducted a walking assessment to determine recreational access to the channel from both the east and west banks.

Key metrics to be evaluated during this assessment were public access to the waterway, water depth, visible signs of recreation (e.g. swimming, fishing, etc.), and proximity of residential and park areas. Within the marina and park areas, metrics included number of docks, boats and jet skis, availability of ladders for access into and out of the water, and public access from the

banks. Representatives from CDM also noted vegetation, visible signs of trails to the water, bank slope, and water clarity during a tour of each bank.

RESULTS

Boat Survey

Approximately 1.25 miles of Mississippi River channel were surveyed by boat beginning immediately upstream of Cedar Creek [39.95222N, 91.420556W] and proceeding to the southern tip of Quinsippi Island [39.93533N, 91.41675W]. **Attachment A** contains photographs of the channel taken during the tour. Water clarity was noted as murky with visibility limited to less than 1 foot. Boating was limited primarily to the western and middle portions of the channel due to shallow water depths along the eastern bank (**Figure 3**).

Three fishing boats were present on the western portion of Quinsippi Island across from the confluence of Cedar Creek. Attachment A contains photographs of fishing activities witnessed within this portion of the channel.

East Bank Mississippi River Channel

Approximately 0.25 miles downstream of the confluence is an All-American Park with a viewing area. Steps lead from the viewing area to the bank where fishing can occur. However, the bank has a steep slope into the water and is composed primarily of dirt with no vegetation. Further downstream, the Cedar Street CSO discharges into the channel on the south-side of the Quinsippi Island Bridge. This CSO is approximately 1000 feet upstream of Kesler Park. Kesler Park host boat launching and docking facilities. The area is popular for fishing. Several boaters were viewed using the boat ramps and boating through the channel to the main stem of the Mississippi River. Beyond the four boat ramps on the east bank, there are three small piers where fishing and picnicking were observed. In addition, there is a small playground along the bank with a fence separating it from a steep slope to the water. The bank of the park is primarily a moderately steep bank with large rocks scattered throughout. Downstream along this bank is the Quincy Boat Club and a restaurant overlooking the Mississippi River. The eastern portion of the channel is heavily vegetated except for city park areas. While the parks contain boat ramps and piers, there are no ladders from the piers. Within Kesler Park there are areas of easy access to the water. However, there are no established beaches or signs of primary contact along either bank of the channel. Based on water depths along the east bank of the channel (Figure 3), wading would be limited to within three feet from the shoreline. Photographs of these areas and the activities mentioned can be viewed in Attachment A.

West Bank Mississippi River Channel

The western portion of the channel is heavily vegetated and has limited access to the waterway. The Quinsippi Island Bridge is the only connection from the mainland to the island. Roadways from the bridge allow automobile access solely to Art Keller Marina. Access to other regions of the island would have to take place by walking through primarily densely vegetated areas. With the exception of stairways leading to the marina, there were no visible paths to the water on the eastern portion of the island. Banks leading to the marina had a very high slope, limiting bank access mainly to the stairways leading directly to the docks.

Art Keller Marina consists of two separate marinas with the larger of the two containing nine boat docks and the smaller containing three boat docks and a fueling station. Several small

docks and piers lined the eastern portion of the smaller marina as well. Both marinas combined held approximately 150 boats at the time of the survey. No jet skis were visible at any of the docks. A small pier was noted at the marina with men fishing. Many docks and piers contained picnic areas. However, neither the piers nor the boat docks had ladders leading into the water. No sand bars or beaches were noted in either portion of the marina. Due to steep slopes and dense vegetation, access to the banks within the marina would be difficult.

During the boat survey there were no visible signs of past or present primary body contact recreation (swimming, water skiing, wading, etc.). Primary contact recreational activity was identified by looking for rope swings, beaches, jet skis, or ladders into the water from piers and docks. In addition, the Mississippi River channel is a no wake zone and therefore would not permit waterskiing.

DISCUSSION

Results from this initial survey show that existing uses in the Mississippi River channel are primarily recreational navigation and fishing. Canoeing and kayaking could exist within the channel to gain access to Quincy Bay and its backwater wetlands. The City has no established beaches along the channel and physical access to the water is limited on the western bank of the channel. Although the City maintains parks along the east side of the channel, physical features (i.e. soft sediments, steep drop-offs, concrete banks, limited visibility) most likely make the channel an unsuitable place for swimming. Additionally, the Quincy Park District does not identify any of the parks along the Mississippi River channel as suitable for swimming.

RECOMMENDATIONS

Based upon aerial and topographical maps for the Cedar Street CSO 006 receiving waters and based upon the results of our site-specific survey and assessment, as well as our experience with other CSO designations statewide, the City's permit should be revised to reflect that the actual receiving waters are the Mississippi River and not Quincy Bay and should receive the same designation as the other CSO outfalls to the Mississippi River. Combined sewer overflows in other in Mississippi River communities (e.g. Alton) are not designated as discharging to sensitive areas. In fact, a review of recently issued NPDES permits (Alton, Galesburg, Belleville, LaSalle, Hinsdale, and Marseilles) indicates that where communities discharge to major waterways, small streams, and creeks similar to those in Quincy, the receiving waters are designated non-sensitive areas.

This survey along with the one conducted for Whipple Creek and Curtis Creek were done on a one time basis, and I would recommend expanding these surveys into the 2008 recreational season to gain additional data regarding uses of these waterways. Surveys should be conducted once a month and include weekday and weekend observations.

Figure 1 – Mississippi River at Quincy, Illinois

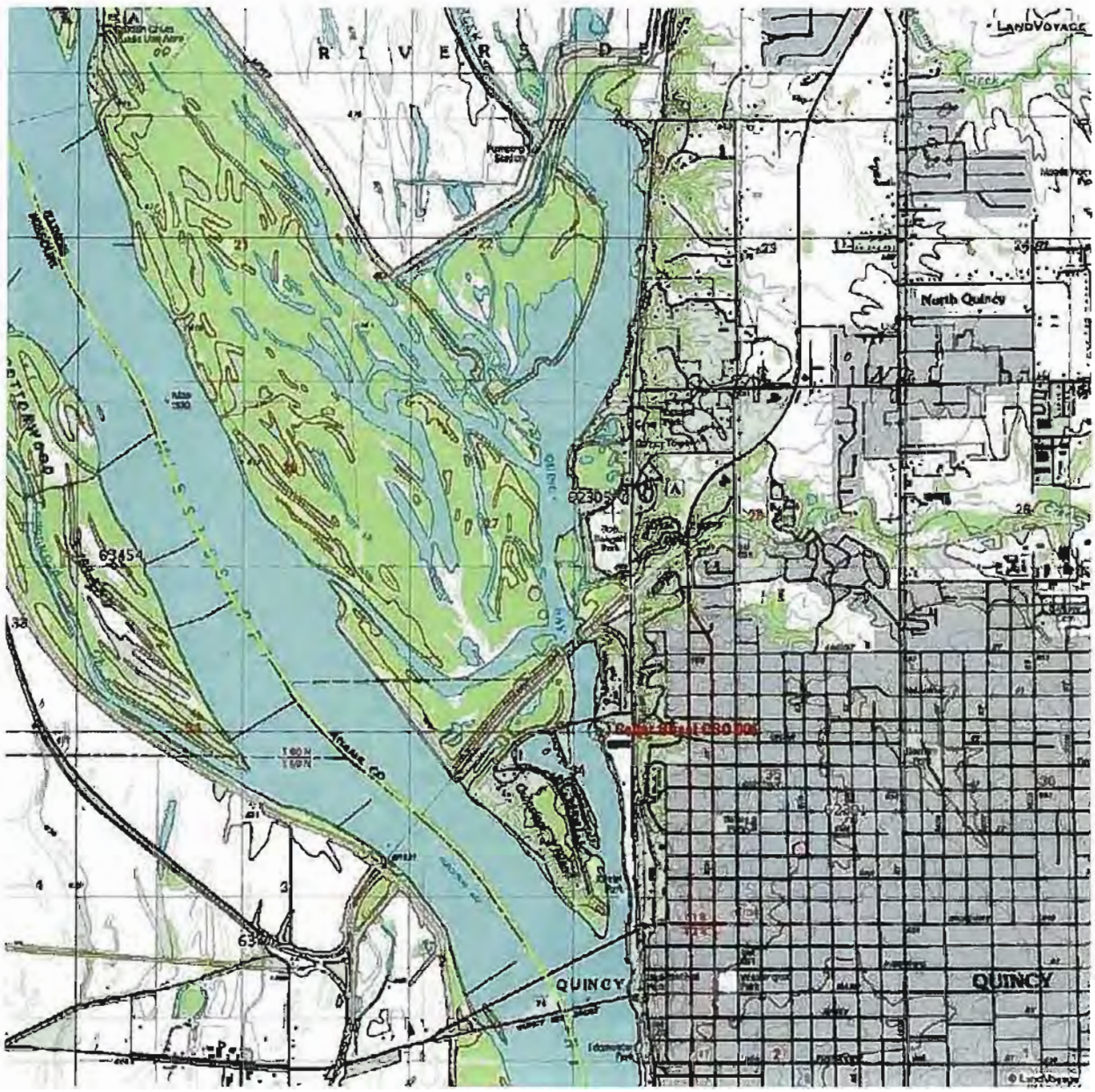
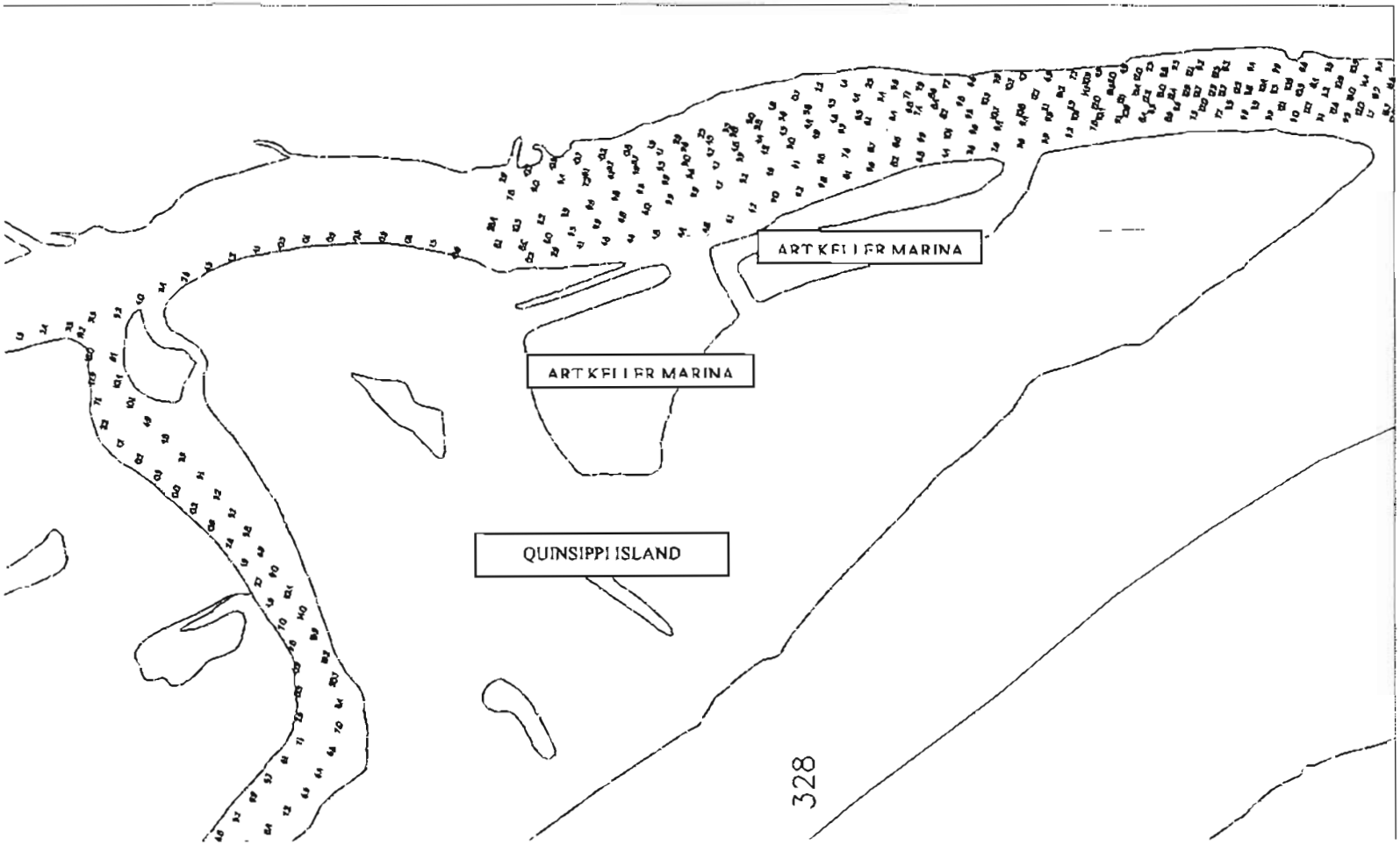


Figure 2 – Quinsippi Island in Quincy, Illinois

Figure 3 – Depth Feet Chart: Mississippi River Channel in Quincy, Illinois (Source: Klinger and Associates)



Attachment A – Photographs

Figure A-1 – Cedar Creek confluence with the Mississippi River Channel

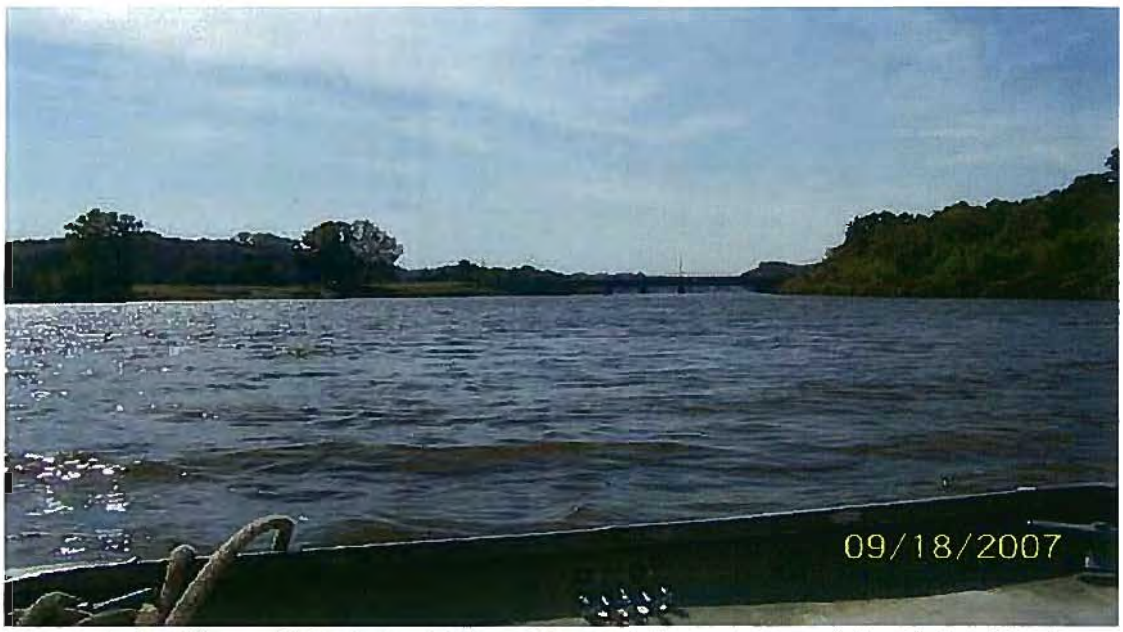


Figure A-2 – View of Mississippi River Channel downstream of the Cedar Creek confluence

Figure A-3 – Fishing on the Mississippi River Channel, west of the Cedar Creek confluence

Figure A-4 – Three fishing boats on the Mississippi River Channel, west of the Cedar Creek confluence

Figure A-5 – View of eastern bank at All America Park

Figure A-6 – View of seating area at All America Park

Figure A-7 – View of trot lines set near All America Park

Figure A-8 – Western bank across bay from All America Park

Figure A-9 – Sign at 2nd entrance to Art Keller Marina

Figure A-10 – Boat docks and fueling station at Art Keller Marina

Figure A-11 – Boat dock at Art Keller Marina

Figure A-12 – Pier at Art Keller Marina

Figure A-13 – Small docks along east bank of Art Keller Marina

Figure A-14 – Recreational boating on the Mississippi River Channel

Figure A-15 – Boat ramps at Kesler Park

Figure A-16 – View of channel (east bank) downstream of Cedar Street CSO outfall.

Figure A-18 – Restroom facilities and small pier at Kesler Park

Figure A-19 – Pier with fishing and picnicking activities at Kesler Park

Figure A-20 – Mississippi River Channel east bank at Kesler Park

Figure A-21 – View of Mississippi River Channel east bank at Kesler Park

Figure A-22 – View of Quinsippi Island bank downstream of 1st entrance to Art Keller Marina

Figure A-23 – View downstream of Mississippi River Channel confluence with the main stem of the Mississippi River

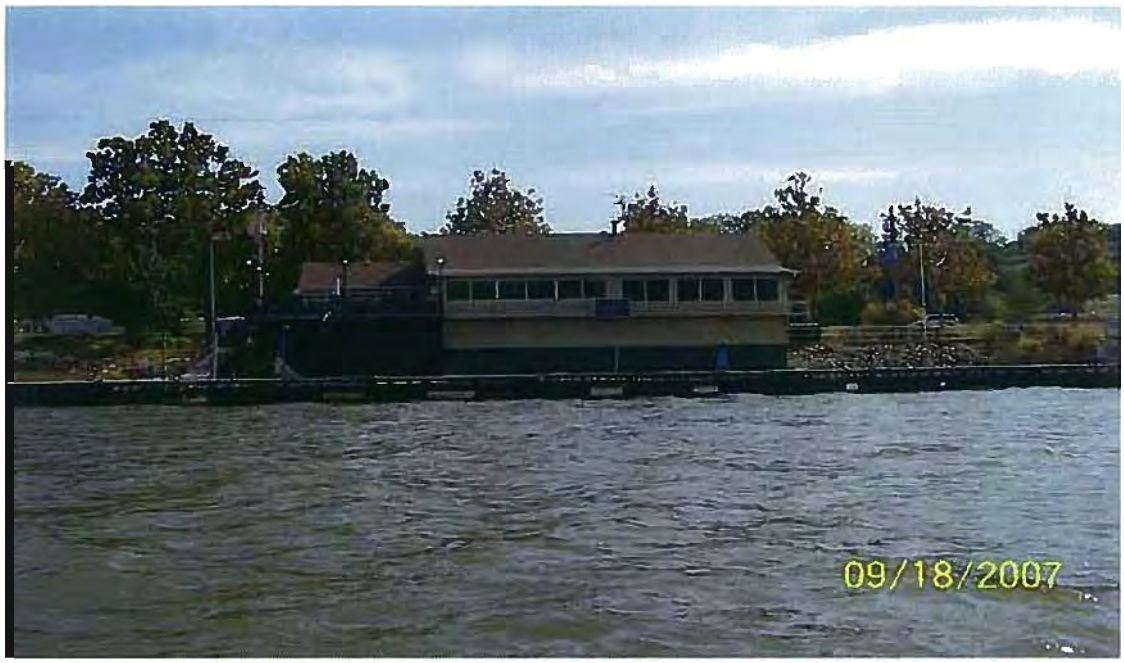


Figure A-24 – View of Quincy Boat Club on the Mississippi River downstream of Kesler Park

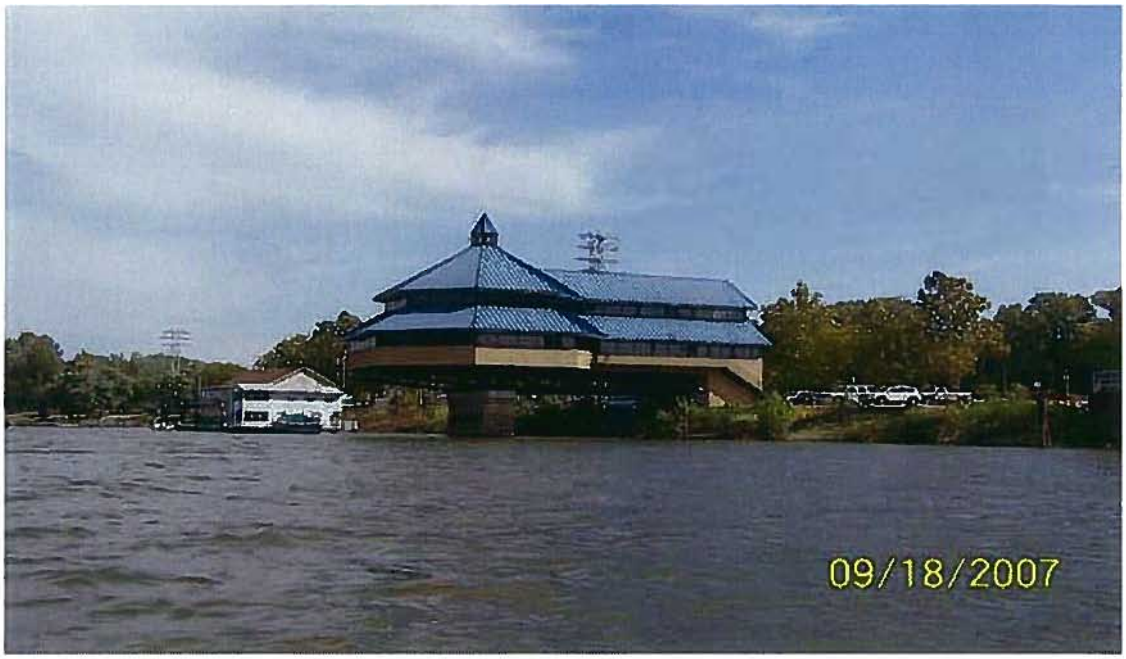


Figure A-25 – View of restaurant overlooking the Mississippi River Channel near the Memorial Bridge

Figure A-26 – View of the southern tip of Quinsippi Island

Figure A-27 – Close-up view of sign located at the southern tip of Quinsippi Island