

**Environmental Roadway Corridor
A Comprehensive Preservation and Mitigation Approach**

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ABSTRACT

The federally funded study of a number of new regional bridge and roadway crossing corridors was combined into a single Environmental Impact Statement (EIS). The sponsoring local agency preferred a roadway and bridge crossing in one of the most sensitive environmental corridors in their county, near sites that contained highly valued aquatic resources. A watershed based approach to the analysis of the potential project's impacts, and the development of an uncommon mitigation strategy that was focused on preserving and enhancing the aquatic resources were required if a new roadway in this corridor was going to be built. The core of the mitigation strategy was built around investigative studies undertaken to support the hypothesis that the subject aquatic resource sites would likely degrade in a "no-build" scenario due to urbanization of the watershed, occurring independently of the proposed roadway. A progressive use of the merged National Environmental Policy Act (NEPA) and Section 404 permitting requirements of the United States Army Corps of Engineers (NEPA merger) created a process whereby this hypothesis could be validated. A comprehensive mitigation strategy was developed as a commitment within the EIS, which will provide the opportunity to preserve the sites and the potential to halt or reverse the noted trend toward degradation at these sites.

ROADWAY PROJECT PURPOSE AND NEED

Kane County, in northeastern Illinois approximately 30 miles west of Chicago, has experienced phenomenal population growth and is experiencing continued pressure for urbanization. In response, Kane County has undertaken a comprehensive countywide planning process and developed a document titled the “2020 Land Resource Management Plan,” adopted officially in 1996, which guides development in the county. This document also serves as a blueprint for other county agencies to develop their own long-range plans and forecasts. This planning process identified crossings of the Fox River as a high priority for transportation improvement projects. The setting for the Fox River Bridge Crossings project and the subject corridors is further illustrated in Figure 1. The Kane County Division of Transportation (KDOT), a local agency, received State (Illinois Department of Transportation-IDOT) and Federal (Federal Highway Administration-FHWA) funding to study proposed bridge corridors across the Fox River in Kane County. All of the corridors were to be combined into a single Environmental Impact Statement (EIS) for processing and review by the resource agencies. The study identified five potential corridors in 1994, as shown on Figure 2, which were to be further studied.

ROLE OF NEPA MERGER

The project, consisting of multiple Fox River crossing corridors, required both FHWA action under National Environmental Policy Act (NEPA) and a standard individual permit from the Corps under Section 404 of the Clean Water Act. It was determined that the project was eligible for processing in accordance with the Illinois Statewide Implementation Agreement (signed in 1994) for concurrent NEPA/Section 404 review (NEPA merger). The NEPA merger process was designed to minimize the potential for unforeseen issues being raised during the Section 404 permit review. The key to this process is to bring together the main commenting/regulating resource agencies at critical stages of the project development to gain their concurrence on basic points. These points are: 1) Purpose and Need, 2) Alternatives to be Carried Forward and 3) Selected Alternatives. On this project, however, the NEPA merger also brought together the resource agencies, the State and the local agency to communicate concerns, and pursue scientific investigations utilizing the combined expertise of all participants. The result was a project that demonstrates how a roadway agency can devise a project that will serve as the framework for stewardship of a unique environmental resource.

The EIS process is still required for projects eligible for review under NEPA merger. The EIS process runs generally parallel, so the information already developed on the multiple corridors for a Draft Environmental Impact Statement (DEIS) allowed the project to reach Concurrence Point 1 – Purpose and Need and Concurrence, and Point 2 – Alternatives to be Carried Forward in July of 1995. The subject corridor, called the CC&P/Stearns Road Corridor, was one of the five alignments to be studied as an Alternative to be Carried Forward. However, at the Concurrence Point 2 meeting serious reservations were raised by the resource agencies about this particular corridor, because of the presence of a number of highly valued aquatic resource sites in or near the corridor. The corridor included rare types of wetlands in northeastern Illinois, graminoid fens and sedge meadows that are highly dependent on the chemistry of groundwater flow for their unusual plant species. The plant species, called calciphyles, have adapted to calcereous discharge, which surfaces at points in Kane County due to the unusual topographic and geologic conditions created by repeated glaciation. The comments related to this corridor may be summarized by the statement “impacts to fens are unmitigable.” The proposed bridge/roadway alignment and its relationship to highly valued aquatic resource sites is identified in Figure 3.

CC&P/STEARNS ROAD CORRIDOR

Initial studies to address the EIS requirements were performed on all five corridors and a DEIS presenting the results was circulated in June of 1998. The majority of the comments received on the DEIS centered on the CC&P/Stearns Road Corridor and its potential adverse impact on the highly valued aquatic resource sites, consistent with earlier comments made at the Concurrence Point 2 meeting. KDOT, directed by the Kane County Board, wanted to continue to explore the possibility of building the roadway and bridge crossing within the CC&P/Stearns Road corridor despite the reservations expressed, because of a number of other considerations and constraints. These considerations were mainly political with significant opposition from local residents to a new regional traffic route near their neighborhoods challenging several of the other possible corridors. The CC&P/Stearns Road Corridor involved the least public objection while offering the most immediate relief to traffic congestion within highly populated parts of the country.

The corridor includes a lengthy reach of a tributary of the Fox River, Brewster Creek, as well as the Fox River crossing itself. At the proposed crossing of the CC&P/Stearns Rd. Corridor of the Fox River, the river maintains a channel width of approximately 100 meters (330 ft.). The water surface elevation in the river is highly regulated by

a number of run-of-the-river dams, that make it an attractive recreational spot for watercraft. The substrate of the river is gravel and cobble over bedrock and the stream depth is approximately 0.1 - 0.3 meters (0.3 – 1 ft.). Brewster Creek within this corridor retains a stream width of 3.5 – 8 meters (11.5 – 26.2 ft.) and a depth range from 0.2 - 0.7 meters (0.6 – 2.3 ft.) within moderate to high water clarity. In the area of particular interest, the substrate is cobble, gravel and sand and the bank vegetation primarily consists of scrub shrub and woodland.

Much of the existing land within the watershed of the corridor is engaged in mining of limestone aggregates for construction purposes. The sand and gravel deposits, which are a source of the unusual water chemistry, required for fen conditions, are also an excellent source of a commercial grade building products.

ACQUATIC RESOURCE SITES

The corridor contained a total of 38 separate wetland or potential wetland sites, which were surveyed utilizing Corps of Engineers Wetland Identification methodology. Of these sites, 19 were identified as wetlands, while other classifications included Riverine Riparian corridor. The high functioning sites within or near the corridor are two fen/seep wetland systems with a third fen/seep located immediately offsite and within the influence zone for secondary impacts. Descriptions of these unique sites are as follows:

- 1) Brewster Creek fen/seep – The Brewster Creek fen/seep is a designated Illinois Nature Preserve and includes some 1.3 hectares (3.37 acres) of sedge meadow and wet scrub shrub land. The area includes a tributary to Brewster Creek called the East Branch of Brewster Creek, which bisects the site and includes the floodplain area of this tributary. The floodplain area adjacent to the creek is where groundwater slowly emerges at the surface and drains laterally across a sedge meadow into the creek. This area is also periodically flooded during extreme rainfall events from the creek itself. An extensive botanic survey conducted by the Illinois Natural History Survey identified 78 different plant species within this area with a Floristic Quality Index (FQI) of 34.3. FQI is based on Floristic Quality Assessment methodology from “Plants of the Northeastern Illinois Region” (Wilhelm & Masters, 1994) and is a measure of the conservancy of the plant community. Higher numbers indicate rare and diverse plant communities with values over 25 rating an area as “exceptional.” Other studies have been conducted which recorded as many as 199 native plant species at this site. There are plants present for each of the following

communities; a sedge meadow, a fen, or a seep. There are also encroachments of floodplain flora species that are considered invasive, which may be due to sedimentation from over-bank flooding of the creek.

2) McLean Boulevard (or Day's) fen – This site is located west of the Fox River and is adjacent to the roadway corridor, but separated by the CC&P Railroad. This fen is situated along the slope that extends from higher elevations associated with farm fields to lower elevations adjacent to the existing CC&P Railroad. The wetland is a complex of three semi communities representing 1) seep-run areas that are in close proximity to flowing water, and 2) nearby saturated areas that are dominated by tussock sedge with occasional shrub hummocks and 3) reed canary grass areas that are associated with the existing farm drainage channels. In September of 1999, 128 native plant species were observed at this site for an FQI of 48.

3) South Elgin Sedge Meadow-This site encompasses some 7.61 hectares (18.8 acres) and is a complex of sedge meadow, wet meadow and marsh. This site was initially considered to be outside the immediate roadway corridor because it is separated by the railroad embankment from the proposed roadway alignment. Further studies, conducted after Concurrence Point 2, showed that the site is within a zone of influence of the roadway considering groundwater movement and prevailing wind patterns. The fen wetland complex is composed of several habitat types, including a graminoid fen, sedge meadow and marsh. Plant inventories taken from June to September of 1999 revealed the presence of 157 native plant species, with an FQI of 61.

In carrying forward this alternative corridor for initial studies to reach Concurrence Point 3, roadway alignments were adjusted early to avoid all direct impacts (dredging or filling). These three high functioning sites' sensitivity to changes within the watershed left lingering doubts and concerns among the resource agencies as to whether the existence of a new roadway nearby would cause these sites to degrade further or whether they would be lost completely if the new roadway was built.

HYPOTHESIS OF CONTINUED SITE DEGRADATION

The value of these sites has been known for a number of years, and the watchful stewardship of the local populous and the Forest Preserve District of Kane County provided evidence for a historic record of the flora at these sites. Review of these records and anecdotal observations led to the formulation of a hypothesis that these sites were already declining in biodiversity compared to similarly characterized sites due to development within the watershed. It was clear that only a watershed based approach to this corridor study would provide the technical information required to test this hypothesis. A comprehensive watershed based approach to mitigation strategy was advocated by the Forest Preserve District of Kane County for the preservation and enhancement of the highly valued sites and embraced by KDOT. The technical “tools” developed at this scale and the broader approach to mitigation allowed for a shift in perspective to a finding of “no net harm” with respect to the construction of a new roadway in this corridor.

FORMATION AND ROLE OF TECHNICAL ADVISORY COMMITTEE

The NEPA merger process fostered communication that led to the creation of a Technical Advisory Committee (TAC) by the Federal Highway Administration (FHWA) composed of reviewing and commenting resource agencies. The agencies represented on the TAC included the United States Environmental Protection Agency, the United States Fish and Wildlife Service, the United States Army Corps of Engineers, the Illinois Department of Natural Resources, the Illinois Nature Preserves Commission and the Illinois Department of Transportation. The purpose of the TAC was to challenge the local agency and its consultants working on the project and to eventually concur with and support the hypotheses developed during the process. The TAC was also instrumental in the development of mitigation strategies. The TAC had to be convinced that, as a minimum, if the roadway were built, a finding of “no net harm” for these sites could be made. Secondly, the comprehensive mitigation strategy was seen as a way to “turn around” the degradation process. The TAC was convened at approximately 3-month intervals, with each meeting reviewing a longer period of data collection. The data often indicated unexpected trends and observations, which were discussed thoroughly among the resource agencies present so that a consensus could be built among the resource agencies and the local agencies’ consultants. The project consultants are: Alfred Benesch & Company, Christopher B. Burke Engineering, Ltd., Huff and Huff, Incorporated, Natural Resource

Technologies, Incorporated, STS Consultants, Schneider Geosciences, Incorporated, the Illinois State Geological Survey, Transland and The Morton Arboretum.

DISCUSSION OF INVESTIGATIVE STUDIES

Work under the comprehensive mitigation strategy approach began with the development of a work plan by the project consultants for review by the TAC. The purpose of the work plan was to identify the studies required to address the concerns raised by the commenting resource agencies on the DEIS. The concerns raised centered on two key issues with regard to the health of these sites. They were 1) what would be the effect of the roadway on the groundwater chemistry and quantity; and 2) what would be the effect of the use of deicing agents that might be windborne to the aquatic sites. A number of studies were undertaken to support the hypothesis that the sites were already degrading, and to predict, by evaluating a no-build scenario, to what degree this degradation would continue to occur. Other studies were identified to address the full range of comments on this corridor from review of the DEIS. These included studies to determine whether the project would have any associated water quality violations and how they might be mitigated. Biological sampling would be used to assess the “health” of the stream ecosystem and to determine a baseline for preparation of mitigation strategies for potential impacts to Brewster Creek.

The backbone of the work plan was an extensive data collection component for groundwater and surface water direction, movement and chemistry, which would be the inputs and calibration data for a groundwater and surface water hydrologic model. The data collection and analysis period was the schedule driver for reaching Concurrence Point 3. Groundwater was monitored at 26 locations over a minimum of one water-year, utilizing 58 monitoring wells. An additional 6 monitoring wells were installed later after discussion with the TAC to specifically bracket key points within the corridor, particularly the high value aquatic resource sites. Surface water was monitored at an additional 7 locations. The local roads would be monitored throughout the winter to measure the effects of salt spray and splash on the areas adjacent to existing roadways within the corridor. These studies would define the background levels of contamination to which these existing sites were exposed, and also help predict the effects of the new roadway in place.

It was important to the agencies funding the investigations that trends and conclusions be identified as efficiently and as quickly as possible because of the significant cost of the scientific and engineering studies being undertaken. The TAC was the mechanism whereby the conclusions and trends observed could be discussed and dissected, and the work plan and study product refined to address new concerns as they arose. There was not a preconceived notion that it was possible to build the roadway corridor near these sites without impacts. If the project was to move forward it was important that convincing scientific evidence be presented supporting a finding of “no net harm” with respect to the roadway.

Data collection for the range of studies identified began in the fall of 1999 and extended through the spring growing season of 2000. A number of challenges in the data collection were observed quickly, including poorly functioning automatic equipment and an unseasonably “snow free” winter.

The key component being tracked in the monitoring of groundwater chemistry was chlorides. Other studies had previously shown a link between degradation of fens and presence of chloride contamination. Northeastern Illinois uses primarily sodium chloride, calcium chloride and other derivatives as deicing agents on roadways. The use of alternative deicers was investigated extensively, but because of the rather significant safety issues that are associated with the use of deicing salts it was believed that KDOT could not guarantee that chloride based deicing agents would not be used.

The data collection methodology for windborne chloride deposition had been used before in studies performed for the Illinois Department of Transportation on new roadway corridors, and essentially included placement of collection buckets along a transect at different distances from a roadway source. The previous studies indicated that site specific conditions such as orientation, with respect to prevailing winds, traffic and number of lanes limited the applicability of these previous studies’ conclusions to this corridor. The data collection from the buckets was also challenged by human contamination and background dust conditions.

A hydrologic model of the entire watershed and hydraulic model of the main creek and its tributaries in the corridor was developed and calibrated to stream gage data obtained for this study. The purpose of this watershed model was to predict flood-flow rates for the purposes of observing local and state floodplain and floodway construction

regulations, but it was also used as an aid in determining the zone of surface water influence as a vector for the movement of chlorides into these high functioning areas. Stream “health” was characterized by sampling the fish and macroinvertebrate communities, which generally showed surface water quality in the stream range from “fair” to “good.”

The groundwater model created by Natural Resource Technologies was based on the monitoring performed for the project and was one of the last components of the study to be completed. This was intentionally delayed so that the longest period of monitoring record could be used for calibration purposes. The new roadway was put into the groundwater model with a representation of all vectors for chloride movement, based on soils permeability and application rates observed in the previous winter as adjusted for the records for winters that were considered to be more representative. The groundwater model, used in combination with the groundwater sampling and monitoring program confirmed several suspected sources of chloride contamination of the groundwater feeding the fens. One of the most prevalent sources of chlorides in this area is introduced from septic fields (on-site sewer disposal systems) for single-family homes. Due to the high grain-hardness of well water in the area, most homes use salts extensively to “soften” water for home consumption. This “soft” salty water, rich in carbonates is then discharged to the septic field where it leaches into the shallow groundwater. A number of residents adjacent to the existing high functioning sites, which are also properties that fall on the preferred alignment, had septic fields, which were known sources of groundwater chloride contamination. Further, the creek system throughout the corridor was also a source as the stream was both a “gaining and losing stream” from a groundwater perspective at various reaches throughout the project site. Chloride concentrations in Brewster Creek were sampled in 1999 and 2000 to establish background levels due to existing sources. The chlorides concentration sampling shows a seasonal trend with highest concentrations occurring at periods associated with deicing activity.

Groundwater sampling in the area has been done for a relatively extended period because of the presence of two landfills adjacent to the corridor, within the Brewster Creek watershed. The data showed that the chloride concentrations in the ground water were highly variable, with the highest concentrations recorded at wells adjacent to the landfills, but also with high chloride concentrations observed in those areas influenced by residential septic fields.

The salt spray and splash study helped define the areas of expected deposition, which are highly dependent on the number of roadway lanes, traffic and orientation of the roadway with respect to prevailing winds and the site. This zone turned out to be within approximately 100 meters of the roadway itself. The proposed roadway alignment was already severely constrained by the necessity to avoid and minimize direct impacts to wetlands, but particularly the high functioning wetlands themselves. Given all constraints, windborne deposition within the sites would be most difficult to mitigate.

TECHNICAL MEMORANDUM – RESULTS AND MITIGATION STRATEGY

The results of the studies were compiled in a Technical Memorandum, finalized for review by resource agencies in July of 2000, along with the conclusions drawn from these studies and recommendations on a mitigation strategy. The Memorandum detailed the comprehensive mitigation strategy for the CC&P/Stearns Road corridor, which addressed the following potential quantifiable and un-quantifiable impacts:

- Airborne deposition;
- Changes to surface runoff quantity and timing;
- Changes to existing surface stormwater conveyance system;
- Pollution of surface water from roadway construction and operation;
- Changes to groundwater quality and conveyance;
- Changes in-stream habitat.

The heart of the mitigation strategy is to buy additional property beyond the roadway right-of-way to create buffer zones under public management around the highest quality environmental resource areas. There are also a number of other strategies, which taken collectively, became the basis for what was called the Environmental Roadway Corridor. The strategies included collecting the roadway runoff in a series of detention and retention ponds, whose purpose was to reduce pollutants associated with roadways, but also to pipe the chloride contaminated water away from discharge points that would affect the high functioning sites.

Direct impacts to these three noted highly valued sites have been avoided in the development of an alignment for the roadway. Mitigation was required for the secondary impacts, such as changes to groundwater chemistry or quantity, or contamination due to airborne chloride deposition. Mitigation strategies developed in the Technical Memorandum focused on all foreseen vectors of potential degradation of these sites, including windborne

deposition, surface water deposition, and groundwater contamination and depravation. Chlorides are extremely difficult to remove from surface runoff and flowing waters once introduced, therefore the most effective strategy for mitigating the potential to raise chloride concentrations in the adjacent streams was to make sure that the roadway system collected surface runoff and pollutants to the maximum extent practicable. Discharge points into Brewster Creek were then selected based on the results of the groundwater model, which predicted the areas and levels to which chlorides born in surface waters would be reintroduced into the groundwater. This led to the development of a series of extended period detention basins. In addition, the roadway section is to be drained in a closed drainage system consisting of curb and gutter, inlets, and storm sewers, whose purpose is to collect the runoff and discharge it through the basins, and then into receiving points down gradient of the high functioning sites.

To achieve the proposed corridor alignment, the acquisition and evacuation of a number of homes was required. These existing residences were found to be sources of elevated chlorides in the groundwater, and by removing their on-site sewage disposal systems (septic fields) the pollutants reaching the groundwater and stream system were further reduced.

Another vector for chloride deposition, airborne, could not be effectively eliminated, but could be managed through the use of berming and vegetation to break up the prevailing wind patterns, and force re-deposition of airborne chlorides closer to the roadway corridor where they would be subject to wash-off into the surface water conveyance system. It was also found that there were significant background sources of airborne chloride deposition due to adjacent limestone mining operations. These would partially be eliminated by the purchase of these areas for construction of the roadway. The strategic planting of certain existing mining spoil slopes would also help to break up prevailing wind patterns that were known to effect existing deposition patterns.

MITIGATION STRATEGIES AT KEY AQUATIC RESOURCE SITES

Each of the three key aquatic resource sites required a somewhat different mitigation and long-term stewardship strategy. These strategies depended on a number of factors, including a quantifiable potential for impact from the new roadway corridor, the level of cooperation of other agencies governing land adjacent to the corridor itself and the degree to which the comprehensive mitigation fit into the mission and vision of other concerned agencies.

Brewster Creek Fen/Seep

Unlike the South Elgin Sedge Meadow, the Brewster Creek fen/seep was already designated an Illinois Nature Preserve and is under local public stewardship. The greatest potential impact from the roadway had to do with potential changes in surface water chemistry due to the release of deicing salts to the stream system, which runs through the fen/seep. This site, considered to be outside of the traditional roadway corridor, was upwind of critical prevailing wind patterns. The stormwater management and surface runoff improvement program, embodied in the stormwater management plan, was found to balance the presence of the new roadway corridor against the needs of the resource.

The studies identified a number of other environmental resource issues within the Brewster Creek corridor that will be addressed as part of the mitigation strategy for the roadway. Brewster Creek itself had been highly channelized and fish migration suffered from the placement of roadway culverts for a private driveway. These culverts and a significant stream reach were on property designated for acquisition to provide floodplain fill compensatory storage and mitigation for direct impacts to other wetlands within the corridor. The roadway project then became an opportunity to “re-naturalize” the stream corridor, which would include removal of the roadway culverts, to reestablish fish passage. The removal of the concrete lining used for streambank stabilization, and replacement by bio-engineered streambank stabilization that can serve a variety of environmental resource functions, is a commitment made to balance any impacts attributable to discharge of roadway runoff on the “health” of the stream system.

Day’s Fen

Day’s fen was also considered “outside” of a traditional roadway corridor in terms of direct impacts, and the fen was also in public ownership by the Kane County Forest Preserve District. The degree of urbanization within the groundwater recharge zone of the fen was of more concern to the resource agencies. The groundwater studies prepared for the Technical Memorandum, had defined a groundwater recharge zone for this fen that was as yet still undeveloped, but under tremendous development pressure. The recharge zone was threatened with the potential for contamination or decreasing groundwater flow. KDOT was instrumental in gaining the cooperation of the Village

of South Elgin, who had annexed the property and regulated local land use, to pass a “groundwater recharge zone protection ordinance” in May of 2000 that further regulated development above and beyond traditional stormwater management flow requirements and zoning. The ordinance requires that any new developments will balance the water budget for groundwater recharge, as well as require that any areas that are likely to become a source of change in groundwater chemistry direct their surface runoff away from the recharge zone. This ordinance has been applied to new industrial zoning and has effectively guided the development within the recharge zone. Getting the ordinance passed was a key component of the overall environmental road corridor strategy and was a success story built on the cooperation obtained by KDOT, the sponsoring local agency.

Day’s fen was shown to be within the zone that could be expected to receive windborne deicing agent deposition from the new roadway. The issue of windborne contaminants to Day’s fen was balanced by berming and landscaping plantings that will help to mitigate for an existing windborne chloride source directly attributable to ongoing limestone quarrying operations within the roadway corridor and adjacent to the fen.

South Elgin Sedge Meadow

The South Elgin Sedge Meadow is a site that requires and benefits from mitigation in a variety of forms. The site itself was under private ownership and was purchased by KDOT in advance of project approval to bring it under public ownership and stewardship similar to the other two sites. Secondly, additional stormwater management, in the form of curb and gutter and storm sewerage, was used to direct roadway runoff downstream of the site, so that critical wash-off periods in the spring would not affect the surface water chemistry that was identified as contributing to degradation at the site. In addition, the storm sewer portions were designed to reduce chloride inputs from the adjacent roadway into the groundwater. Studies performed for the Technical Memorandum found interesting responses and associations between the hydrology of the adjacent tributary of Brewster Creek and the sedge meadow itself. The tributary, draining just over a square mile, passes through a relatively restrictive culvert at the railroad embankment. Studies performed in the Technical Memorandum seem to indicate that the frequency of over-bank flooding due to the restrictive railroad culvert has led to a high degree of sedimentation, which is slowly changing the plant community at the fringe area between the creek and the sedge meadow to less conservative species.

ENVIRONMENTAL ROADWAY CORRIDOR COMMITMENT

Studies were summarized in the Technical Memorandum, which was then reviewed by members of the TAC. Based on their review, an “Environmental Roadway Corridor” commitment was drawn up for presentation at the Concurrence Point 3 meeting. The Environmental Roadway Corridor at this stage consisted of commitments as follows:

Step 1) KDOT, in coordination with the Forest Preserve District, will generate a concept plan and a vision statement for the areas to be purchased and maintained as part of the environmental roadway corridor outside of the roadway itself. This vision would include land restoration strategies for those areas that were currently in agriculture or other land uses.

Step 2) Land acquisition will proceed on the critical parcels identified, along with those properties needed for the roadway right-of-way required in concert with a phasing plan for the roadway construction. It was envisioned that the construction of the roadway corridor would proceed from east to west in 3 stages.

Step 3) Properties acquired in advance of actual construction activities, per the roadway phasing, would receive immediate management assistance, in the form of management and monitoring plans and assistance to implement the plan consistent with the vision generated in the first step.

Step 4) Construction would proceed in concert with the planned roadway construction phasing. Construction activities include the construction of stormwater management and water quality improvement ponds and re-vegetation/restoration activities taken in concert with the vision statement.

Step 5) A period of interim management of the aquatic resources, by the sponsoring local agency KDOT, would occur while the commitments outlined and made effective through the EIS and record of decision process were implemented.

Step 6) Properties outside of the plat of highways would be transferred to the Forest Preserve District of Kane County for long-term management. This is considered a crucial step in the stewardship of these unique aquatic resources.

CONTINUATION OF EIS PROCESS

At the Concurrence Point 3 meeting, held in May of 2001, there was general agreement that this corridor could be constructed, with the comprehensive mitigation identified, and achieve “no net harm” to the resource. The CC&P/Stearns Road alignment could now be considered a selected alternative. This was only possible because of the flexibility that the NEPA merger process fostered to undertake studies and build consensus on issues important to both resource managers and local agencies.

The EIS process continues with the submittal of the Preliminary Final EIS (PFEIS) in May of 2001 following closely the Concurrence Point 2 meeting. The PFEIS was included with the information and detailed mitigation compiled in the Technical Memorandum, and addressed additional comments on the DEIS. The FHWA is submitting the Preliminary Final EIS to the EPA for publication in the Federal Register in November 2001 and the Record of Decision on the EIS could be signed in January 2002.

LIST OF FIGURES

FIGURE 1. General Location Map

FIGURE 2. Study Corridor Location Map

FIGURE 3. CC&P/Stearns Road Corridor and High Quality Aquatic Resource Sites

FIGURE 1. General Location Map



FIGURE 2. Study Corridor Location Map

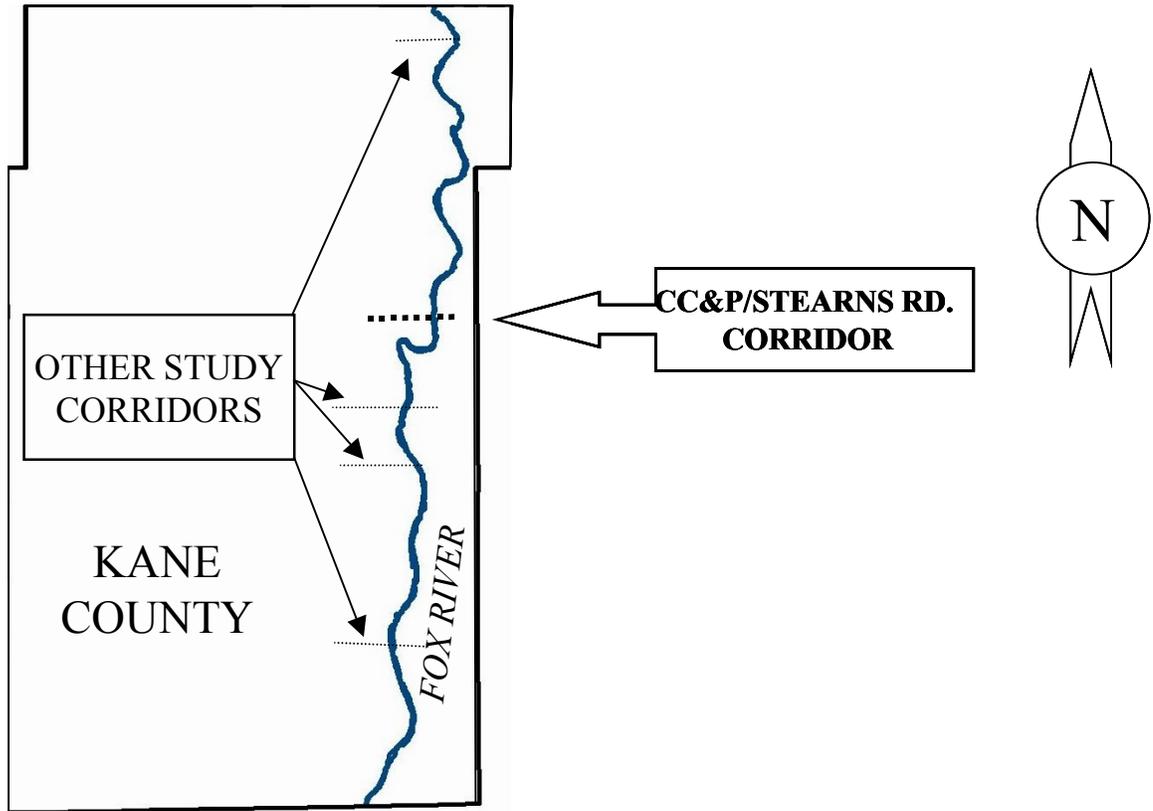


FIGURE 3. CC&P/Stearns Road Corridor and High Quality

