

**UNIVERSAL CASE OPINION COVER SHEET**  
**U.S. District Court for the Central District of Illinois**  
**Springfield Division**

Complete  TITLE  of  Case	<b>The Kansas City Southern Railway Company and Norfolk Southern Railway Company</b>  <b>Plaintiffs,</b>  <b>v.</b> <b>Sny Island Levee Drainage District</b>  <b>Defendant.</b>
Type of Document  Docket Number  Court  Opinion Filed	<b>Opinion</b>  No. 3:13-cv-03144-RM-TSH  UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF ILLINOIS  Date: 07/17/2015
JUDGE	Honorable Richard Mills U.S. District Judge 117 U.S. Courthouse Springfield, IL 62701 (217)492-4340
ATTORNEYS  For Plaintiffs	Paul M. Brown - & Paul Edwin Stoehr Thompson Coburn - One US Bank Plaza - Suite 3500 606 N. 7 <sup>th</sup> - St. Louis, MO  Everett B. Gibson - Bateman Gibson - Suite 1010 65 Union Ave. - Memphis, TN 38103
ATTORNEY  For Defendant	Harry B. Wilson & JoAnn Tracy Sandifer Husch Blackwell Sanders - Suite 600 - 190 Carondelet Plaza - St. Louis, MO 63105-3441

**IN THE UNITED STATES DISTRICT COURT**

**FOR THE CENTRAL DISTRICT OF ILLINOIS  
SPRINGFIELD DIVISION**

THE KANSAS CITY SOUTHERN )  
RAILWAY COMPANY and )  
NORFOLK SOUTHERN RAILWAY )  
COMPANY, )  
 )  
Plaintiffs, )  
 )  
v. )  
 )  
SNY ISLAND LEVEE DRAINAGE )  
DISTRICT, )  
 )  
Defendant. )

NO. 13-3144

**OPINION**

RICHARD MILLS, U.S. District Judge:

The Sny Island Levee Drainage District is the oldest Drainage District in Illinois. It was established in 1880, shortly after the passage of the Illinois Drainage Law in 1879. It consists of about 114,000 acres in the counties of Adams, Calhoun and Pike in the State of Illinois and is about 60 miles long on the east bank of the Mississippi River, with most of the land being in Pike County.

Kansas City Southern Railway Company and Norfolk Southern

Railway Company operate portions of their railroads over land located within the Sny which consists, respectively, of approximately 212 and 145 acres.

This is an action for injunctive relief and was tried at bench for twelve days, producing a voluminous record which includes hundreds of exhibits.

The case concerns a one-time assessment on all properties in the Sny, based on the benefit each property receives from its levees and drains.

It will be helpful to create a roster of the witnesses for both the Plaintiffs and the Sny, giving their backgrounds and connections with the subject matter of this case.

## I. PLAINTIFFS' WITNESSES

During the bench trial, the Plaintiffs called the following witnesses:

Michael Reed, the superintendent and treasurer of the Sny, who was called as a hostile witness;

Nicholas Pinter, PhD, a professor of geology at Southern Illinois University at Carbondale, who was retained as an expert witness;

David Griffith, a retired division engineer with Norfolk Southern

Railway Company;

David W. Brookings, a former Railroad employee and licensed civil engineer who focuses on railway engineering consulting; and

Donna Beck Smith, a certified public accountant, who was retained as an expert witness.

The Plaintiffs introduced deposition testimony from some of the aforementioned witnesses. The Plaintiffs also presented deposition testimony from the following individuals:

Michael D. Klingner, a licensed civil engineer and President and CEO of Klingner and Associates (KA), the professional engineering firm hired by the Defendant to develop an assessment methodology for all benefitted properties in the District;

James Powell, a licensed civil engineer now working part-time at KA, who worked on this project;

Daniel J. Lundberg, Jr., a farmer and a Sny Commissioner since 2007;

Gavin Risley, a licensed professional engineer who works as a water resources engineer at KA;

Russell E. Koeller, a farmer and a Sny Commissioner since 1993;  
David Human, an attorney at Husch Blackwell Sanders in Clayton,  
Missouri, who has represented the Sny Island Levee Drainage District.

## II. DEFENDANT'S WITNESSES

The Defendant called the following witnesses:

Michael D. Klingner, the KA President and CEO;

James Powell, the KA engineer who worked on the project;

Michael Reed, the Sny superintendent and treasurer;

Gavin Risley, the KA water resources engineer;

Gary Dyhouse, who was called as a rebuttal witness and is a licensed professional engineer retired from the United States Army Corps of Engineers, and now who works as a private consultant in hydrology and hydraulics;

Daniel J. Lundberg, Jr., a Sny Commissioner; and

Russell E. Koeller, a Sny Commissioner.

The Defendant also designated deposition testimony from the following individuals:

Bryan Chapman, the pump station supervisor for the Sny Island Levee Drainage District;

Jeffrey McCracken, the Assistant Vice President, Maintenance-of-Way and Structures, for Norfolk Southern Railway Company;

Kenneth Lee, the Director of Field Engineering for Kansas City Southern Railway Company; and

Paul Fetterman, a former engineer with Kansas City Southern Railway Company and other railroads who now works as an independent consultant.<sup>1</sup>

The Court makes the following findings of fact and conclusions of law.

### III. NATURE OF ACTION AND JURISDICTION

This is an action for injunctive relief under the anti-tax discrimination provisions of the Railroad Revitalization and Regulatory Reform Act of 1976, codified at 49 U.S.C. § 11501 (“4-R Act”). Plaintiffs Kansas City

---

<sup>1</sup>Some of the deposition testimony introduced by both parties is part of the record from *Kansas City Southern Ry. Co., et al. v. Borrowman, et al.*, Case Number 3:09-CV-03094. The parties also submitted portions of the transcript of the bench trial held before Judge Scott in that case.

Southern Railway Company (“KC”) and Norfolk Southern Railway Company (“Norfolk”) (collectively, the “Railroads”) challenge the one-time “additional assessment” that Defendant Sny Island Levee Drainage District (“Sny” or the “District”) is attempting to levy on the properties owned by the Railroads.

Jurisdiction of this Court is invoked under § 11501 and under 28 U.S.C. § 1331 and 28 U.S.C. § 1337.

#### IV. ISSUES AND LEGAL PRINCIPLES

The 4-R Act prohibits “state and local taxation schemes that discriminate against rail carriers.” *CSX Transp., Inc. v. Ala. Dept. of Revenue*, 562 U.S. 277, 280 (2011). “Discrimination is the failure to treat all persons equally when no reasonable distinction can be found between those favored and those not favored.” *Id.* at 286 (internal quotation marks and citations omitted). Citing Supreme Court dicta, the Seventh Circuit observed that discrimination under the 4-R Act depends upon whether a state offers a sufficient justification for any disparate treatment of railroads or whether the railroads—either alone or as part of some isolated and target group—are

the only commercial entities subject to a tax. *Kansas City Southern Ry. Co. v. Koeller*, 653 F.3d 496, 510 (7th Cir. 2011) (citing *CSX Transp.*, 562 U.S. at 288 n.8, and *Dept. of Rev. v. ACF Industries, Inc.*, 510 U.S. 332, 346 (1994)).

Under the 4-R Act, therefore, “[a] discriminatory tax is one that imposes a proportionately heavier tax on railroading than other activities.” *See id.* at 510 (internal quotation marks and citation omitted). In valuing property for tax purposes, the “State may use whatever method or methods it likes, so long as the result is not discriminatory. The Act does not prohibit the use of any valuation methodology. It prohibits discrimination.” *CSX Transp., Inc. v. Georgia State Bd. of Equalization*, 552 U.S. 9, 22 (2007). Accordingly, the statute allows a railroad to show that the methodology chosen by the District is discriminatory. *See id.* At the beginning of the trial, the Court stated the issues as follows:

The first is under 49 U.S.C. 11503, whether the additional assessment by the Sny discriminates against the railroads compared to other landowners in the District in the appropriate comparison class. And second, whether the appropriate comparative class is all landowners in the District, including agricultural owners, or just commercial and industrial



landowners in the District.

In *Koeller*, the Seventh Circuit considered the potential comparison classes under subsection (b)(4) of the 4-R Act, noting the options as (1) a universal approach, which would include all property owners within the District; (2) a functional approach, wherein railroads would be compared with other commercial and industrial property; or (3) a competitive approach, which would compare railroads to their chief competitors in determining whether discrimination existed. *See Koeller*, 653 F.3d at 508.

The court quickly rejected a universal approach and determined that a competitive approach would not be appropriate because the Railroads do not have any real competitors in the District—there are no motor carriers, air carriers, barges or ships that the Sny is trying to tax. *See id.* at 508-09. Accordingly, the court determined that the “functional, middle group of all other commercial and industrial taxpayers” is the appropriate comparison class under subsection (b)(4). *See id.* at 509.

In *Alabama Dept. of Revenue v. CSX Transp., Inc.*, 135 S. Ct. 1136 (2015) (“*CSX II*”), the United States Supreme Court considered whether

a state law violated the 4-R Act by taxing diesel fuel purchases made by a rail carrier while exempting similar purchases made by its competitors.<sup>2</sup> *See id.* at 1139. The railroads were required to pay a 4% tax rate on the purchase or use of diesel fuel for their rail operations. *See id.* at 1140. Trucking transport companies (motor carriers) and water carriers, both of which competed with railroads, were exempt from the diesel fuel tax. *See id.* Although motor carriers paid a 19-cent per gallon fuel-excise tax on diesel, water carriers paid neither the sales nor fuel-excise tax on diesel. *See id.*

First, the Court in *CSX II* addressed what the appropriate comparison class is for a claim under § 11501(b)(4), stating that although “all general and commercial taxpayers is *an* appropriate comparison class, it is not the only one.” *Id.* at 1141 (emphasis in original). The Court determined that the appropriate comparison class depended on the theory of discrimination alleged, explaining:

---

<sup>2</sup>Although *CSX II* was decided after the proposed findings of fact and conclusions of law and post-trial briefs were filed, the parties submitted supplemental briefs addressing *CSX II*'s applicability, if any, to the issues in this case.

When a railroad alleges that a tax targets it for worse treatment than local businesses, all other commercial and industrial taxpayers are the comparison class. When a railroad alleges that a tax disadvantages it compared to its competitors in the transportation industry, the railroad's comparators in that jurisdiction are the comparison class.

*Id.* Based on that reasoning, “all the world, or at least all the world within the taxing jurisdiction, is its comparison-class oyster.” *Id.* Relying on that language, the Railroads claim that the Supreme Court effectively overturned the Seventh Circuit, to the extent that court in *Koeller* held that the appropriate comparison class was other commercial and industrial property. The Railroads allege that the appropriate comparison class is all non-railroad property in the District.<sup>3</sup>

The Court in *CSX II* quickly stated that the breadth of the comparison class is not as extensive as it seems based on the above language. *See id.* at 1141. Because the applicable subsection requires a showing of discrimination, the relevant inquiry involves whether the tax fails to treat similarly situated individuals alike. *See id.* at 1141-42. “A comparison class

---

<sup>3</sup>In determining whether the special assessment discriminates against the Railroads, this Court will assume that the analysis is the same as it is for the purchase taxes considered by the Supreme Court in *CSX II*.

will thus support a discrimination claim only if it consists of individuals similarly situated to the claimant.” *Id.* at 1142.

Based on *CSX II*, therefore, all non-Railroad property in the District would be the appropriate comparison class only if all such property is similarly situated to the Railroads. The Supreme Court noted that “[i]n the Equal Protection Clause context, very few taxpayers are regarded as similarly situated and thus entitled to equal treatment.” *Id.* However, the Court observed that, given the extent of protection under the Equal Protection Clause, the concept of “similarly situated” individuals cannot be as narrow under (b)(4) of the 4-R Act. *See id.* The Court emphasized that commercial and industrial taxpayers must be deemed to be “similarly situated.” *See id.* Any railroad competitors would also have to be considered “similarly situated,” in order to comply with statutory purposes. *See id.*

As for whether any other properties were similarly situated to the Railroads, the Court in *CSX II* stated, “We need not, and thus do not, express any opinion on what other comparison classes may qualify. Sufficient unto the day is the evil thereof.” *Id.*

The Seventh Circuit explained why other commercial and industrial taxpayers are the appropriate comparison class in these circumstances. *See Koeller*, 653 F.3d at 508-09. The holding in *CSX II* does not call into question the Seventh Circuit’s analysis or effectively overrule *Koeller*.

Consistent with Seventh Circuit authority, therefore, the Court concludes that the Railroads are similarly situated to other commercial and industrial properties. Because both parties contend—albeit for different reasons—that the nature of the Railroads’ benefit significantly differs from that of the agricultural and residential properties that make up most of the District, it is difficult to see how the Railroads could be determined to be similarly situated to and, therefore, treated the same under the 4-R Act, as agricultural and residential properties.<sup>4</sup>

## V. FACTUAL FINDINGS

### A. The Parties

---

<sup>4</sup>Because the Railroads existed prior to the construction of the Sny’s levee system, the Railroads claim they are at most incidental beneficiaries while the agricultural and residential properties are the intended beneficiaries of the levees. The District contends that the Railroads would be frequently under water without the levee system.

The KC operates a main line railway over the Mississippi River Flood Plain in the Sny in Pike County, Illinois. The line passes through the District from Pleasant Hill, Illinois, at Railroad Mile Post 265 on the eastern edge of the flood plain to the Sny levee close to the east bank of the River at Mile Post 275, across the Mississippi River from Louisiana, Missouri. This 10-mile KC line is on a raised embankment and crosses the District in a generally east/west direction that is roughly perpendicular to the flow of the river. It has seven bridges and two culverts in the District.

The Norfolk also operates a main line railway over the Mississippi River Flood Plain in the District in Pike County, Illinois. The line passes through Kinderhook, Illinois, at Mile Post DH503 on the Eastern edge of the flood plain to the Sny levee close to Mile Post DH 514, across the river from Hannibal, Missouri. The 11-mile Norfolk line is also on a raised embankment as it crosses the District in a generally east/west direction that is roughly perpendicular to the flow of the river. The Norfolk has eight bridges and 14 culverts in the District.

There was testimony that neither Railroad's raised embankment was

designed to withstand Mississippi River floods.

The Sny is a drainage district currently existing and operating under the Illinois Drainage Code, 70 ILCS 605/1-1 *et seq.* (“Drainage Code”). The Sny was organized in the Circuit Court of Pike County, Illinois in 1880 to construct and operate a levee and drainage system to protect the District’s lands from the river floodwater and surface water runoff. It is the largest levee and drainage district on the Mississippi River system north of St. Louis.

The District includes land located within Adams, Pike and Calhoun Counties in the State of Illinois. It consists of approximately 114,000 acres and is about 60 miles long. The amount of land devoted to agricultural use within the District is 99.5%. There are approximately 700 landowners in the District. Plaintiff KC owns approximately 212 acres of land within the Sny, all of which is used for a railroad right-of-way and is part of an active rail line between Springfield, Illinois and Kansas City, Missouri. Norfolk owns approximately 145 acres of land within the District, all of which is used for a railroad right-of-way. The land is part of an active Norfolk rail

line between Fort Wayne, Indiana and Kansas City, Missouri.

Approximately 90% of the Sny is agricultural. There are scattered residential structures and commercial structures, the two railroads, two electric utilities, and eight pipelines, and a few not-for profit improvements (such as churches), in addition to vacant lots, and wetlands/woodlands/recreational properties that are not farmed.

The Sny is governed by three elected commissioners. At all relevant times, the commissioners have been Brady Lee Borrowman, Russell E. Koeller and Dan Lundberg. The commissioners are very involved in the District's day-to-day operations. The District employs a superintendent/treasurer who manages its operations. Since 1995, Michael Reed has held that position. Reed consults with the commissioners multiple times during the week—and sometimes multiple times per day.

#### B. Regulation of the Sny

The Sny's levees and drainage systems were constructed and are maintained pursuant to both state and federal law. Originally, the levees were authorized under the Illinois Levee Act of 1879 and they remain



authorized under the Drainage Code. *See* 70 ILCS 605/1-2(s) and 605/4-14. The Sny flood control systems are also authorized pursuant to the Federal Rivers and Harbors Act of 1902, 32 Stat. 331 § 14, and its amendments, and the Flood Control Act of 1954, 68 Stat. 1261 § 203, P.L. 83-780, p.14. The Sny levees come under the jurisdiction of the United States Army Corps of Engineers (“the Corps”) and are subject to extensive Corps regulation.

Under the Drainage Code, the commissioners have a continuing “duty” to keep the levees and improvements in operation and repair. *See* 70 ILCS 605/4-15. Sny Superintendent Michael Reed and Michael Klingner, the KA President and CEO, both testified that the Sny levees have been continuously maintained, with major maintenance activities, following the 1993 flood and major rebuilding in the 1960s, in accordance with Corps standards and with funds available from the passage of the 1954 Flood Control Act by Congress.

The Sny levees qualify as “84-99” levees, in reference to Pub. L. 84-99, 33 U.S.C. § 701n. Michael Klingner testified this status makes financial

assistance available for repairs as long as the levees meet certain standards.

The Corps conducts detailed annual and periodic inspections of the 84-99 levees and reports back to the Federal Emergency Management Agency (“FEMA”) to ensure compliance with the extensive Corps and FEMA standards.

The Sny levees are certified by FEMA as providing a 100-year level of flood protection under 44 C.F.R. § 65.10, which contains design and operational criteria including, for example, slope stability and freeboard. Freeboard means the height of the levee above the 100-year flood elevation. Michael Klingner testified there are many reasons why FEMA accreditation is important, one of which is that such status dramatically lowers flood insurance premiums.

Since 1903, there has been only one levee failure event in the Sny. The 1993 flood was the flood of record on the Upper Mississippi. Water levels reached 500-year flood level in some places in the Sny, including Reach 1. Reaches 2, 3 and 4 held in 1993 and the KC Line in the District suffered no damages.

Since 1993, the District has experienced 100-year and 200-year flood events. The levees have held throughout both occurrences. Russell Koeller, one of the commissioners, testified he believed the Railroads would have been two to three feet underwater in some locations during the high water events in 2008, 2011 and 2013. The Sny also withstood a 100-200 year flood event in 1973.

The Drainage Code authorizes levee and drainage districts such as the Sny to levy “original assessments,” “annual maintenance assessments” and “additional assessments,” in the manner provided by the Code. 70 ILCS 605/5-1. Under the Drainage Code, “[t]he court may . . . direct the levy of an annual maintenance assessment to pay the cost of repair, maintenance and operation of the system.” 70 ILCS 605/3-23.

The designation “additional assessments” applies to all assessments other than the original assessment (the first assessment levied for the construction of the original work of the district) and annual maintenance assessments, and the term “additional assessments” “shall include assessments for the completion of original, additional or repair work, the

performance of additional or repair work, the construction, enlargement or repair of pumping plants, the payment of lawful obligations incurred by the district and for all other lawful purposes as set forth in [the Drainage Code].” 70 ILCS 605/5-1. The Drainage Code provides that “[n]o land or other property shall be assessed for benefits more than its just proportion of the entire assessment or in excess of the benefits thereto.” 70 ILCS 605/5-1. It is the propriety of an additional assessment which is before the Court.

### C. The Sny’s additional assessment

(1)

After the organization of the Sny, the Pike County Circuit Court authorized the levy of an annual maintenance assessment for the purpose set forth in the Drainage Code. At various times over the years, the Pike County Circuit Court has approved increases or modifications in the annual maintenance assessments. Additionally, that court has authorized the levy of additional assessments for the purposes set forth in the Drainage Code.

From the time it was established until 1961, Sny’s annual assessment

was allocated entirely on a per-acre basis. From 1961 to 2009, Sny's annual assessment was allocated on a per-acre basis adjusted for inflation. For its 2009 annual assessments, Sny adopted a different methodology that applied only to interstate properties owned by railroads, pipelines and utilities. This methodology was developed by David Human, the Sny attorney, with input from James Powell, a KA engineer. On July 3, 2012, this Court enjoined the collection of the discriminatory annual assessments and entered judgment for the Railroads. *See Kansas City Southern Ry. Co., et al. v. Borrowman, et al.*, Case Number 3:09-CV-3094.

Since July of 2012, Sny has not undertaken a reassessment for annual assessments and continues to be enjoined from collecting those assessments from the Railroads. Sny's annual assessment is now allocated on a per-acre basis for all lands other than railroads and other interstate properties. In evaluating the reasonableness of the total proposed assessment, Sny considers the per-acre impact of an assessment. However, Michael Reed testified that does not necessarily reflect how the assessment will be allocated among the properties.

In June of 2011, while the case involving the 2009 annual assessment was pending, Sny began the process for levying a one-time additional assessment on all lands in the Sny. On July 20, 2011, Sny filed an amended petition in which it asked the court to confirm an additional assessment of \$6,536,566.00. At the hearing on that petition, the District reduced the amount of the requested additional assessment to \$5,853,162.00. On December 5, 2011, following a hearing, the Pike County Circuit Court entered an order approving an additional assessment in the amount of \$5,853,162.00, and directed Sny to prepare and file with the court an assessment roll showing how the additional assessment would be spread on all lands within the District.

The District hired KA to develop an assessment methodology for all benefitted properties. KA has represented the Sny for more than a century. Therefore, KA has extensive knowledge regarding its levees, operations and the various properties located within the District. Michael Klingner, the head of the project team, testified that KA represents about 25 levee and drainage districts in Illinois, Missouri and Iowa and consults with another

30 drainage districts. KA has been hired by the Corps to inspect levee systems throughout the Midwest. It has also worked with numerous levee districts seeking FEMA certification. Accordingly, the Court concludes that the KA team is familiar with the Drainage Code and with the extensive Corps and FEMA regulations governing levees and flood controls. The commissioners relied upon KA's expertise in developing and applying a benefits methodology.

On December 21, 2012, Sny filed with the Pike County Circuit Court an assessment roll for the additional assessment and petitioned the court for approval of the roll. The Sny stated in its December 21, 2012 petition that the assessment roll spread the additional assessment according to the "benefit" derived by each parcel in the District from Sny's levees and drains. Two objections were filed in response to Sny's petition for approval of the assessment roll: one by the utility Illinois Rural Electric Cooperative and one by the Railroads. Following the Pike County Circuit Court's denial of the objection filed by the Illinois Rural Electric Cooperative, the court entered an order dated June 17, 2013 approving the Assessment Roll for all

properties with the exception of the Railroads.

Under the assessment roll for the additional assessment, KC will be taxed \$91,084.59 if the tax is paid in one installment or \$103,612.52 if the tax is paid in five annual installments. Under the assessment roll for the additional assessment, Norfolk will be taxed \$102,976.18 if the tax is paid in one installment or \$117,139.71 if the tax is paid in five annual installments.

For the purpose of determining the allocation of the additional assessment, Sny's engineers classified properties into five categories: (1) agricultural, (2) residential, (3) wetlands/recreational, (4) not-for-profit, and (5) commercial and industrial. The commercial and industrial category was further divided into the following four subcategories: (1) electric utilities, (2) pipelines, (3) railroads, and (4) other commercial structures.

There were two properties classified by Sny's engineers as electric utilities. There were four landowners whose lands were classified as pipelines by the District's engineers. Excluding pipelines, electrical transmission lines and railroads, 28 properties were classified within the



commercial and industrial category. There were also eight tracts classified as not-for-profit and 315 properties as residential.

(2)

In the previous lawsuit, the Seventh Circuit rejected the universal approach based upon the plain language of § 11501 and the Supreme Court's decision in *Dept. of Rev. v. ACF Industries*, 510 U.S. 332, 340 (1994) (recognizing congressional intent to “permit the states to tax railroad property at a higher rate than agricultural land”). *See Koeller*, 653 F.3d at 508. As noted earlier, the court held that the proper comparison class for determining whether railroads were discriminated against is all other commercial and industrial properties. *See id.*

In *Koeller*, the Seventh Circuit considered whether an annual assessment Sny sought to impose on the Railroads was discriminatory. *See id.* at 499. For decades, Sny had calculated the amount due for the “uniform annual maintenance assessment” by determining the number of benefitted acres and assessing a per acre fee to each landowner based on the number of acres owned. *See id.* at 499-500. The Sny Commissioners

decided that in 2009, the District's two railroads, four pipelines and two utilities would no longer be assessed based on a per-acre formula. *See id.* at 500. However, 692 of the 700 landowners would continue to be charged on a per-acre basis. *See id.* Because the commissioners believed the per-acre formula "underassessed" the railroads, pipelines and utilities, they decided to calculate the assessment for those properties on a "benefit" basis. *See id.*

Ultimately, the Seventh Circuit determined that the tax was discriminatory because the railroads were the only industrial and commercial property to be taxed according to the benefit it received from flood prevention. *See id.* at 510-11. The other 14 industrial and commercial taxpayers were either charged no maintenance assessment or were treated the same as the agricultural landowners. *See id.* at 511. The court found that the intent to discriminate was apparent based on the methodology that the District used, which was "questionable at best." *Id.*

Although the Seventh Circuit was critical of Sny's methodology, it did not reject the view that an improved property should be taxed according to

the benefit received, stating:

We emphasize that we are not criticizing the District's theory that improved property should bear a greater proportional share of the tax burden. The problem, as we have already said, was in the implementation. If, as the commissioners maintain, the Drainage Code requires them to assess all property on a "benefit basis" then their entire scheme should reflect that, for agricultural and other commercial and industrial properties just as much as for [railroad, pipeline and utility] properties.

*Id.* at 512.

The United States Court of Appeals for the Eighth Circuit held that ultimately, in order to prove a disproportionate assessment to benefit ratio, the railroad—as the party challenging the tax—must show by the applicable burden of proof what the correct values are. *See Burlington Northern R. Co. v. Bair*, 766 F.2d 1222, 1226 (8th Cir. 1985). “The burden of proof in determining assessed value and true market value is governed by State law.” 49 U.S.C. § 11501(c). The court in *Bair* observed that, in evaluating the evidence, “the district court should give due deference to the [tax official's] expertise in valuation.” 766 F.2d at 1226.

The Illinois Drainage Code appears to afford significant discretion to

the commissioners. *See generally* 70 ILCS 605/5-3. It goes without saying that there is a certain amount of guesswork which goes in to the computation of benefits. Fifty years ago, the Illinois Appellate Court stated:

It is at once apparent that, be the assessments ‘original,’ ‘additional,’ or ‘annual,’ they cannot be determined with the scientific exactitude of temperature or blood pressure. They necessarily rest upon conclusions reached from a consideration of known physical factors and data, and upon some factors more or less illusory upon which the minds of reasonable men might well disagree.

*Commissioners of McGee Creek Levee and Drainage Dist. of Pike and Brown Counties v. Dennis*, 58 Ill. App.2d 466, 474 (4th Dist. 1965); *see also Leonard v. Arnold*, 244 Ill. 429, 439 (1910) (noting that because there is no “invariable standard for the measurement of benefits,” the commissioners’ decision necessarily involves “judgment and discretion” and is a matter over which reasonable minds may disagree).

Under the Drainage Code, the commissioners’ assessment roll “shall make out a prima facie case on behalf of the district on all issues as to the amounts of benefits, damages and compensation.” 70 ILCS 605/5-10. The burden then shifts to the objector to prove, by a preponderance of the

evidence, that the assessment role is not correct and the extent to which it is not correct. *See Matter of Saline Breach Drainage Dist.*, 172 Ill. App.3d 574, 581-84 (4th Dist. 1988). “We know of no way whereby they can show their assessment incorrect without at the same time showing what it should be.” *See Dennis*, 58 Ill. App.2d at 478.

In determining the propriety of any assessment, the evaluation may take into account the different uses of the property. *See Cache River Drainage Dist. v. Chicago & E.I.R. Co.*, 255 Ill. 398, 402-03 (1912). In *Cache River*, the Illinois Supreme Court rejected a railroad’s argument that it must be assessed the same per acre rate as agricultural land, stating:

It is also contended that the benefits assessed exceed the appellant’s proportionate share of the estimated cost, and in this connection it is said no acre of farm land was assessed more than \$3.08 an acre, and no acre of appellant’s land, lying at the side of it and identically the same kind of land, is assessed less than \$41.66 an acre, and it is asked: What basis is there, in law, for such gross discrimination? The error in the argument lies in the assumption that the two acres mentioned are identically the same kind of land. They were originally, but it scarcely seems to require argument to establish that a railroad track is not the same kind of land as the farm through which it is built though the soil beneath it is the same.

*Id.* The court further stated that “[w]hatever tends to decrease the expense

of the maintenance of the track and railroad or the operation of trains is a legitimate subject for consideration” in the assessment of benefits. *Id.* at 405.

(3)

The Court recognizes the difficulty of measuring with precision the benefit from flood protection received by the numerous properties within the District. There is an element of subjectivity and even guesswork in determining hypothetical damages from hypothetical flood events. The Sny Commissioners made judgment calls which were based on information from the KA engineers, with whom the commissioners worked closely to develop an assessment roll for the District’s proposed additional assessment. The commissioners were actively involved in exploring the proper way to calculate benefits. They told Michael Klingner they wanted KA to base the assessment roll for the additional assessment on the benefit—including the levee improvements and interior drainage improvements.

The Sny Commissioners interpreted the Seventh Circuit’s decision that enjoined Sny’s attempt to base its annual assessment on benefits to

require only that the District provide more detail as to how benefits were created. Sny Superintendent Michael Reed testified that the commissioners initially considered retaining a court reporter to record all of their decisions regarding the additional assessment but ultimately decided not to do so.

The commissioners met in closed executive sessions on three occasions in 2011 and 2012 to discuss the additional assessment. David Human, the Sny attorney, and Michael Klingner attended meetings with the Sny Commissioners in person or by telephone conference call on September 8, 2011, November 1, 2011, November 8, 2011, and February 1, 2012. KA sent its report regarding the additional assessment to Human's law firm to review the language before submitting it to the commissioners for approval.

The District presented testimony from two witnesses, Michael Klingner and Michael Reed, that each property was assessed the same exact percentage of its annual levee protection benefit—25.30%—toward the levee protection costs included in the additional assessment. The Railroads do not challenge the percentage of benefit used to allocate the assessments for

the properties. The Railroads will pay 25.30% of their benefit, whatever that number is.

Therefore, the question the Court must determine is whether Sny properly estimated the annual levee benefits to the Railroads compared to other commercial and industrial properties. The answer is based upon the proper definition of the relevant benefit at issue, which in turn depends upon the reason for the particular assessment.

The Drainage Code allows the commissioners to “levy assessments upon the lands and other property benefitted to pay the costs thereof and the expenses incident thereto” and requires the commissioners to prepare an assessment roll for the owners affected by the work or expense funded by the additional assessment and the amount of benefit, if any, levied against each tract. *See* 70 ILCS 605/3; 605/4-18; 605/5-16. The District presented testimony that the additional assessment was imposed, in large part, to cover expenses for repair and improvement of the levees including repairs to meet new FEMA and Corps standards and retain the 100-year FEMA certification, such as adding sand to maintain the proper freeboard and



slope ratios, and repairing damages to the levees from the 2008 flood. The circuit court found that these costs were “necessary and advisable in order to maintain the integrity of the levee system, ensure proper drainage and flood protection to the property within the District, and comply with federal standards and mandates.”

#### D. KA’s approach

(1)

Michael Klingner testified that the KA engineers measured the benefit from the levee work in terms of the damages avoided by having a levee system that prevents flooding. More specifically, they measured benefits by estimating the potential damages from a levee failure by assuming that the levees were temporarily removed at a particular cross-section and then replaced. Gary Dyhouse, the hydraulics and hydrology engineer with over 30 years experience with the Corps—most as the chief of the hydrologic engineering section of its St. Louis District—testified that this method is the Corps’ standard approach for benefit analysis.

The Hydrologic Engineering Center Flood Damage Reduction Analysis

(HEC-FDA) was used by KA to determine the levee protection benefits to all categories of properties. The HEC-FDA computer software program was developed by the Corps Hydrologic Engineering Center. KA did not perform any hydraulic modeling for the additional assessment. Klingner testified his firm used the Corps model.

The HEC-FDA software program is a statistical model that predicts the expected annual damages to various types of properties based upon the height and number of flooding events and the predicted damages at various flood levels. The model employs what is known as a Monte Carlo simulation to analyze flows and flow profiles throughout a 50-year simulation period (based upon historical information) and determines the probable likelihood and extent of flooding at a particular elevation in order to statistically derive the expected annual damages to a particular property. Michael Klingner testified the Monte Carlo simulation is the industry standard for estimating flood damages. It is used by the Corps and FEMA and is accepted by many state agencies.

KA input the same three types of data as to all properties: (1) land use

and improvement data; (2) hydrologic and hydraulic data, including water surface profiles, frequency/discharge relationships, and stage/discharge relationships; and (3) depth-damage functions.

Regarding the first item James Powell, who focuses on the impact and flow of water, testified that KA worked with the District to categorize each property based on its land use because different types of properties incur different types of flood damages. KA then evaluated what it would cost to replace a structure damaged in a flood, which they found best represented by the depreciated cost of the structures. In determining these costs, KA primarily used the R.S. Means construction manual (“Means”) which, according to Michael Klingner, is the industry standard publication on costs. Means includes a location factor to adjust the national costs to the Quincy, Illinois, vicinity. KA did not include any damages attributable to the contents of the homes, agricultural properties or commercial businesses, because people generally have plenty of time to move contents from houses, farms and businesses during major flood events.

As for the second type of data, the KA engineers grouped all of the

properties into ten zones assigned a river mile based upon their location and elevation. Klingner testified that, in accordance with industry standards, KA used the water surface profiles developed in the Corps 2004 Flow Frequency (FF) Study, an effort to update the river profile after the 1993 flood, which was based on the Corps' Hydrologic Engineering Center River Analysis System ("HEC-RAS"), a Mississippi River hydraulic model. The FF study was used to obtain data regarding benefit analysis.

The FF study provides the specific water surface of elevations for each river mile in the Mississippi River Channel and the KA engineers extended those elevations into the floodplain to assign water surface profiles to the properties in the various zones of the District. The KA engineers' believed that if the levees were breached, or temporarily removed, flood levels in the floodplain would quickly return to the flood water surfaces in the River Channel prior to the flood event.

The Railroads' expert, Dr. Nicholas Pinter, was critical of this conclusion, testifying it was contrary to most of the research on the subject. Additionally Russell Koeller, a Sny Commissioner, testified that during the

1993 breach, the water level in the Mississippi River channel at Hannibal, Missouri, dropped 2-3 feet within two hours. Because they did not perform hydraulic modeling, KA did not analyze the dynamics of how flood waters will fill a floodplain in a given flood event. Michael Klingner testified this was consistent with Corps' practices.

Michael Klingner testified the Corps' 2004 FF Study was the most current and best available input data for the analysis. When asked about the methodology, James Powell testified that "it would be redundant and impossible to come up with a study of flows and stages calibrated near to the quality" of the FF study.

The third type of data, depth-damage curves, predicts the expected property damages based upon the height of flood events. Klingner testified the curves could be plotted on a graph with water depth on the Y axis and the damage expectation on the X axis to demonstrate the relationship between water depth and expected damages. Depth-damage curves for residential and various types of commercial properties have been developed by FEMA and other entities based upon statistics and other data from years

of nationwide flood events. Because there were not any adequate depth-damage curves published for certain types of properties, such as pipelines, utilities and railroads, however, the KA engineers developed their own curves based on industry standards. James Powell testified this was an accepted practice within the industry and involved evaluating the locations of the structures, the components of the structure, the potential depths of the floodwaters, the duration of floodwaters, the water's impact on the structures and the necessary repairs and applying their professional judgment. Gary Dyhouse, the retired Corps engineer who now consults in hydrology and hydraulics, testified this is similar to what the Corps has done in projects involving railroads.

Michael Klingner, James Powell and Gavin Risley worked together and at times consulted with other KA professionals on the Sny assessment team. Klingner and Powell developed the scope of the work and the overall methodology. Risley collected the flood frequency data from the Corps FF study and for calculating the input values for various properties for the HEC-FDA computer program. Risley worked with Klingner to develop a

depreciated replacement cost methodology to value the various properties, which was confirmed by Powell. Powell was responsible for collecting or developing the depth-damage curves. Klingner reviewed value calculations and damages estimates and other work while providing input and assistance as needed. Powell ran the HEC-FDA software to determine the benefits to each parcel. Risley created a spreadsheet with each property and its annual benefit. Each of the three KA engineers worked on the written report.

(2)

The KA Report explains the application of this methodology for the various types of properties. Additionally, the KA engineers prepared summary worksheets that identify the assumptions made, the HEC-FDA inputs and the estimated annual damages for the various categories of properties. For the commercial and industrial properties, they created a worksheet for each individual or property type.

Michael Klingner testified that KA used the same basic methodology to determine the estimated levee benefits to all properties, with modifications in the application as necessary to account for different uses

of property. For example crop damage, not depreciated replacement cost, was the input used to determine the HEC-FDA damages for agricultural ground because crop damages are the primary driver of benefit to the agricultural property. However, Klingner testified that despite the differences in how various types of properties are used, KA sought to be consistent in its methodology. Regarding agricultural property, James Powell obtained inputs relating to the timing and duration of flooding, standard crops and crop prices from multiple sources. Powell developed depth-damage curves to predict the damages to crops in various flood events across the ten elevation zones in the District. The HEC-FDA Model then calculated the estimated annual damage to each tract based upon its total acreage and elevation. Based upon standard industry methodology, the KA engineers did not consider damages to farm structures because that damage is so incidental when compared to the crop loss, given that the contents of a structure are typically moved prior to a flood. Powell testified that, in valuing agricultural properties, the classification of the soil and the productivity of the land is most important—not the value of any structures



on that land.

The District includes 315 residential properties. The properties are typically grouped in the Villages such as Hull and Pleasant Hill, though only portions of the Villages are within the boundaries of the District. The residential properties in the Sny are very similar in age, size and manner of construction. Because of these similarities, KA and the Commissioners decided to look at an average residence in order to simplify the project—instead of attempting to value over 300 residences. The Court finds this practice to be reasonable.

Gavin Risley used Means to estimate the replacement cost of a typical residence in the District and adjusted that number using Means' historical cost dating back to 1993 costs. This was because many of the residences were significantly rebuilt following the 1993 flood. The value determined by KA was comparable to U.S. Census values. James Powell input this value, the standard depth-damage curves, and the flood stage information into the HEC-FDA model and arrived at an estimated annual benefit of \$1,200. KA assumed that homeowners would not rebuild their homes more

than once following a flood over the course of the 50-year simulation period it used.

(3)

Gavin Risley and Michael Reed and his staff spent a significant amount of time identifying all of the commercial properties in the District. They found 28 commercial uses, some composed of more than one Sny parcel, and Reed visited and photographed each one. Several of these are older, small operations with very simple structures. For some properties, only a portion of the property is in the District. Many are warehouses or one or two-room hunting lodges. Some of the buildings are in a state of disrepair or are deteriorating. Typical construction is a Morton-style, pole building with metal siding and roofs. The District pulled the County data sheets to identify the size and construction type of each structure and used Means to calculate the construction cost of each. After determining that replacement cost, Risley discounted that cost back to the original construction date using Means' historical cost data. If the county assessor's records indicated that the building had been remodeled, he added 30% of

the value back to the costs as of the remodel date.

Although KA's method of valuation was not pursuant to any published manual, the KA team concluded, based on their experience, engineering judgment and work on other projects, it was a reasonable estimate of the enhanced remodeled value. Gavin Risley was the primary KA official who calculated values for the Sny and he sought to "perform a fair and uniform, consistent methodology to assess everyone that was receiving a benefit." Risley has never been licensed or trained as a real estate agent, broker or appraiser and, at the time he calculated the structure values for the benefits analysis, he did not know the definition of "fair market value." Rather, Risley had a general knowledge of the meaning of fair market value.

The Railroads note that Risley could not identify any publication that supported a valuation methodology based on an original cost-to-construct or cost-to-construct as of the date of a major remodel. In calculating structure values, Risley did not consult the HEC-FDA manual, the FEMA Hazus Manual, other published materials or outside experts. Risley did not use fair market value data from the county assessors' offices for residential

and commercial and industrial properties, even though the data was readily available. As a result, the aggregate value for these properties was below the fair market values reported by the county assessors by a difference of more than \$500,000. Risley explained that was because they were looking for depreciated replacement costs instead of fair market value.

Accordingly, KA's valuation method of inputting lower property values resulted in lower annual benefits being outputted.

Gavin Risley testified that KA considered using the county assessor's values for tax purposes as the input number for the commercial properties but the county assessor does not maintain those values for the Railroads or not-for-profit companies, and KA wanted to use a uniform approach. Moreover, Risley testified there is subjectivity with respect to assessor's values and it is not always clear how they are calculated. FEMA uses depreciated costs for its input for benefit analysis and the Hazus-MH manual recommends depreciated replacement cost based upon Means, not assessed or appraised values, for this purpose. Risley explained that flood damages are best measured by the cost to replace the existing structure, not

what someone would have paid for the property before the flood.

There was testimony about the relationship between the depth of a flood and the amount of damages that could occur at various depths. Michael Klingner testified that KA used depth-damage curves published by the Corps and FEMA, if available. For the residential and locally owned and operated commercial and industrial properties, James Powell used depth-damage curves published by the Corps and FEMA. As for agricultural properties, Powell used a published depth-damage curve he modified to account for the timing and duration of flood events.

KA's approach did not value railroad structures in the same way that it valued residential structures or locally owned or operated commercial and industrial properties.

For railroads, pipelines and utilities, James Powell developed his own depth-damage curves. FEMA has published depth-damage curves for pipelines and utilities, which show 0% damages at all flood depths for exposed pipelines and for overhead electric power lines. The depth-damage curves Powell developed for pipelines and utilities show significant damages

from various flood events, even though there was no damage to the pipelines in the Sny in the 1993 flood and Powell is not aware of any specific instance in which buried pipelines or electric transmission towers or lines have been damaged by flooding. However, Powell believed such damage could happen. If Powell had used the FEMA depth-damage curves for pipelines and utilities, his benefit numbers for those types of properties would have been much smaller than the benefit numbers he calculated using his own depth-damage curves. Additionally, although municipal water pipelines incur damage after flooding, Powell did not apply his depth-damage curves for pipelines to the local water and sewer systems. Gavin Risley

supplied the depreciated replacement cost numbers to James Powell who input published depth-damage curves for various classifications of commercial properties, such as a warehouse, garage, etc., and the flood stage information into the HEC-FDA model, generating an estimated annual benefit for each commercial property. Powell testified that elevation is a primary influence on the benefit. Therefore, the benefits to some of the commercial properties were relatively low based upon their high elevations

and/or depreciated replacement values.

The same methodology was used to determine the Railroads' damages. Because no published depth-damage curves exist for railroads, James Powell developed his own after considering a number of factors. Industry literature confirms that "flood damage functions for lifelines such as water, electric power, roads, and railroads can be developed using a combination of historical data, component based modeling, and expert opinion." That is how Powell developed the depth-damage curves for the Railroads. Gary Dyhouse explained that the Corps uses the same approach in determining railroad benefits.

(4)

The Railroads are critical of the KA engineers' lack of education, knowledge or experience in calculating flood damage to railroad property. Moreover, James Powell did not have extensive notes or spreadsheets which showed how he calculated flood damage to railroad property. Powell did not document the various unit values he plugged into the spreadsheet for each damage component before deciding which value to use in his final

report. After completing his damage estimates for railroad properties, Powell adjusted the estimates several times before eventually settling on 25% of the original amounts he estimated (a 75% discount). Powell did not recall and has no record of the figures he used before deciding to use 25% of the original amount. Powell acknowledged that, like engineering in general, there is much uncertainty in the damage numbers he calculated for railroad properties.

To develop the curves, Powell obtained from Gavin Risley detailed cost estimates for various components of railroad improvements, track, ties, siding, etc., from Means. KA verified these against the Railroads' own unit costs for the components of their lines and embankments, confirming that the numbers they used were quite a bit lower than the Railroads' actual costs. Powell reviewed KA's in-house database on embankment repair costs. He obtained data regarding railroad costs and maintenance from KA's Transportation Department. In addition to his personal observations or anecdotal evidence from Sny personnel regarding the damage to the Norfolk in the 1993 flood or other flood events, Powell relied upon his training and



background regarding the flow and impact water has on various types of structures and embankments such as highways, levees and dams.

Based on his knowledge and observations, James Powell testified that the typical flood event involves the water rising slowly in the floodplain following a levee breach, eventually rising over the railroad tracks and resulting in extensive damage. Powell examined the testimony and documents produced by the Railroads relating to the nature and extent of their damages in the Sny and elsewhere in the 1993 flood and used this as a check for his work.

Upon considering all of this information, Powell estimated the potential damages to each Railroad in the 0, 2, 10, 25, 50, 100 and 500+ year flood events. This entailed evaluating the likely damages at seven different water depths, between 0 and 24 feet of water, which represented the minimum and maximum potential flood depths. If the flood damages were under seven feet, Powell assumed no damages. At the 500+ year maximum flood, he assumed only that 25% of the total Norfolk track in the Sny would be damaged and used that percentage to determine the costs for

the various categories of damages at that flood level. He estimated lesser percentages of damages for all flood depths. Powell testified that these were conservative estimates.

Gavin Risley testified that KA depreciated the Railroads' replacement costs back five years rather than to the original construction date due to the rigorous maintenance and upkeep required on the Railroads' improvements. Because of the required improvements, KA determined that five years represented the overall age of those items. KA did not depreciate the embankment costs because dirt does not depreciate. Klingner testified Risley's depreciation approach for the Railroads' improvements was appropriate because they are much better maintained than other properties in the District, some of which were deteriorating. Therefore, it made sense to treat the Railroads differently in valuing the properties.

(5)

The total benefit that KA calculated for all properties in the Sny for "levee protection benefits" was \$12,482,940.64. This included a total annual benefit of \$767,000 for the railroads, \$10,279,492.05 for

agricultural properties, \$378,000 for residential properties, \$109,000 for commercial properties, \$557,000 for pipelines, \$157,000 for electric utilities, \$16,515 for not-for-profits, \$78,240 for vacant lots, and \$140,693.59 for wetlands/woodlands/recreational.

During the litigation, the parties identified an error on the original Norfolk spreadsheet in the unit costs for track and ballast replacement. James Powell had originally input a higher unit cost into the program—a number which was comparable to the Norfolk’s own unit costs for track and ballast—but decided to go with a more conservative unit cost. He explained it is typical to refine and change numbers while performing any type of engineering work and this was not an attempt to “play with the numbers” to achieve a desired result. After estimating the predicted damages to each Railroad at the various flood levels, Powell reduced all of the numbers 75% before running the HEC-FDA program, inputting just 25% of the concluded damages at each flood level into his program to determine the annual estimated damages of \$360,000 for KC and \$405,200 for Norfolk.<sup>5</sup> Powell

---

<sup>5</sup>As for Norfolk, the benefit was revised downward at trial from the initially calculated \$407,000.

testified this reduction was made in order to be conservative due to the amount of variability with flood events. The 25% number represented the minimum or baseline damages estimated for the flood events. The most he did run was 20% to 30%.

James Powell made this reduction to his input values only for the Railroads and pipelines, effectively making the damages for these entities more conservative. Full determined value was used for the commercial and agricultural properties.

Based on the 75% reduction, Powell determined that the total damages to the Norfolk in a 500+ flood was \$3 million which, in today's dollars, is less than a third of the actual damages Norfolk suffered in the 1993 flood. Based on his observations, Powell does not believe the post-1993 improvements would prevent damages to the line. Powell estimated that only a quarter of the line has sufficient riprap to withstand the Mississippi River flows.

For the additional assessment, the Sny assessed properties approximately 25.3% of whatever amount is determined to be the correct

annual levee protection benefit. Under the assessment roll for the additional assessment based on the benefits calculated by KA, the KC would be taxed \$91,084.59 and the Norfolk at \$102,520.76 if the taxes are paid in one installment.

Although the Railroads collectively own 0.3% of the land in the Sny, under the assessment roll developed by the KA firm, the Railroads' share of the total additional assessment for levee protection would be 6%.

If—as they were annually for many years—the Railroads were taxed according to the number of acres of land each owns within the Sny, the KC's additional assessment would be \$23,213.89 and the Norfolk's would be \$15,877.42.

(6)

James Powell's HEC-FDA program produced depth-damage relationships at all possible scenarios between the points input into the program. The various iterations, some 60,000, of the potential flood events and depths at the Railroad's elevations were then run through the Monte Carlo analysis to estimate annual damages.

As quality control checks, Michael Klingner and Gavin Risley reviewed Powell's numbers. Klingner and Risley reconstructed the costs to build the Norfolk and KC lines throughout the Sny, arriving at depreciated replacement costs of \$44 million and \$37 million, respectively. Although Powell did not use those estimates, Klingner used them as a check on the assumptions made with respect to the amount of damages at various flood elevations. Klingner also relied on Means data, the historical data relating to the 1993 flood, data from his own office relating to railroad construction and other construction costs (such as highway embankment), his own knowledge relating to flood damages and his engineering judgment to determine that Powell's conclusions were reasonable. Klingner agreed with Powell's decision to reduce the estimated damages input into the program by 75%, based upon the absence of published curves and uncertainties inherent in a flood situation. Given these unknowns, Klingner believed a conservative approach was appropriate.

Michael Klingner confirmed that the Corps evaluates damages to railroads when it undertakes a benefit analysis. The Corps considers both

the rerouting of the transportation and the potential flood damages to the railroad embankment. KA only evaluated the potential improvement damages without considering rerouting. In that respect, KA's damages calculations were more conservative.

Klingner further testified that, if the Sny levees did not exist, the Railroads would have to redesign their embankment and raise the track throughout the District. KA estimated the cost of such a project to be approximately \$30 million. Dr. Pinter did not include these costs in his no-levée benefit analysis.

KA surveyed the elevations of the railroad lines for purposes of its damages evaluations. At some point, KA identified an error in one of the Railroads' profiles illustrated in the KA Report. Michael Klingner and James Powell confirmed that their underlying data was correct. Powell did not use these illustrations to prepare the depth-damage curves. He relied on the accurate survey results of the railroad elevations.

Regarding the pipelines, KA used a combination of Means and Federal Energy Regulatory Commission data to estimate replacement costs. As with

the Railroads, the improvements were depreciated five years given the pipelines' comprehensive maintenance programs. Although the Hazus-MH manual contains depth damage information indicating no damage to buried pipelines, the KA engineers did not agree with the finding. Based on their assessment of the situation in the Sny regarding damages to buried pipelines, James Powell developed his own depth-damage curves. The Hazus-MH manual approves of this approach in order to perform a more detailed analysis if the information provided is not sufficient. Additionally, KA noted that various lengths of the pipelines in the Sny are exposed and would likely experience damages in a significant flood event, particularly in ditches and at the crossings of the levee. Michael Klingner knew of damage to exposed pipelines in the Sny in 1993, and had seen similar damage in other districts. KA included in its analysis only those pipelines that ran perpendicular or across the District and that were close enough to the levees that they could be damaged in a breach. As he did with the Railroads, Powell reduced his input damages for the various flood events by 75% to account for variability in the potential damages from a flood event.



Klingner reviewed Powell's work.

In a similar manner, KA determined the depreciated costs of the two electric utilities based upon RS Means data. Powell developed his own curves upon determining the published curves were inadequate. Among other factors, KA used experience and knowledge of damages in other flood events in determining the potential flood damages to the utility improvements. The curves assumed minimal damages to the utilities at all water depths below 15 feet. KA determined that significant damages could occur to utility lines and poles at flood depths above this level and Daniel Lundberg, the Sny Commissioner, testified that the floodwaters and floating debris during the 1993 flood snapped or pulled down many of the Illinois Rural Electric Cooperative (IREC) lines and caused damages to the poles as well. The lines were out of service for two to three months. In the Pike County action, Judge Lagowski rejected the IREC's challenge to its assessment, finding the District's "methodology and conclusions with respect to the [IREC] to be fair and reasonable."

KA used a similar methodology for the not-for-profit and

wetland/woodland/recreational properties, making appropriate adjustments for the limited uses and value of the properties. The Railroads adopted KA's benefit conclusions for those properties.

Michael Klingner was asked about using the Hazus software to calculate flood damages, as Dr. Pinter did for most properties. Klingner testified that the Hazus program aggregates the properties and does not separate them into individual structures. He stated it is more of a regional planning tool, while the HEC-FDA is more appropriate for engineering projects because it can be customized to determine damages to individual buildings. Gary Dyhouse testified that the KA method and use of the HEC-FDA program is consistent with Corps and industry usage and standards. Dr. Pinter's approach is not consistent with those standards.

KA also spent considerable time calculating the annual interior drainage benefits to the agricultural properties, which is summarized in the KA Report. Because this was assessed only to agricultural properties, this benefit is not relevant to the Railroads' challenges.

Certain properties are not assessed. These include those owned by the

Illinois Department of Natural Resources, the county governments and the federal, state and county roads. *See* 70 ILCS 605 5/2 (excluding from assessment “public highways, streets and alleys”) and 35 ILCS 200/15-55(a) and 15-75 & 110 (exempting from taxation all property belonging to the State of Illinois and public properties owned by municipal corporations). Additionally, municipal sewer and water lines in the villages (even if taxable under state law) were not assessed based on Michael Klingner’s determination that, because of their elevated locations and distance from the River, they would not be damaged in a flood event and thus are not benefitted—as KA did not include benefits to pipelines distant from, or parallel to, the River that would not be damaged. The Drainage Code only requires the Commissioners to include in their assessment roll the properties “which, in their opinion, will be benefitted, taken or damaged by the proposed work.” 70 ILCS 605 5/2. James Powell explained that a few other properties were assigned zero flood protection benefit based upon their elevated locations. Every other property in the District was assessed a benefit.

### E. The Railroads' approach

(1)

The Railroads retained Nicholas Pinter, PhD, and David Brookings, a professional engineer, to calculate benefits to various categories of property from the Sny's levees. Dr. Pinter, a professor at Southern Illinois University-Carbondale, has an extensive background in floodplain management and flood modeling and is widely published in the fields of hydrology and hydraulics.

David Brookings is a licensed civil engineer with more than 40 years of experience in all aspects of railroad maintenance-of-way and engineering. His experience includes inspecting flood damage and estimating the cost of repair of flood damage to railroad rights-of-way based on field inspections.

The SOBEK computer program Dr. Pinter used for his modeling was developed by the Delft Institute of Hydraulics in the Netherlands, which is an internationally known school of hydraulic engineering. Pinter performed hydraulic flood modeling using SOBEK flood modeling software to determine water levels and water velocities in the Sny floodplain from

various flood events with and without Sny's levees. Pinter used the output from hydraulic modeling as an input for calculating flood damage for all categories of property except railroad property using the Hazus-MH loss estimation software developed by FEMA.

Dr. Pinter did not attempt to calculate flood damages to railroad property because Hazus does not have depth-damage curves for railroad property. Brookings calculated flood damages to railroad property based on his knowledge and experience regarding water velocities during flooding along and through railroad embankments to form judgments regarding the type of damage that would occur at various locations on the railroad right-of-way and the cost to repair such damage from hypothetical flood events shown by Pinter's flood modeling.

Pinter and David Brookings determined levee benefits by calculating the amount of flood damage that would occur on an annualized basis to each category of property if the Sny's levees were not present minus the amount of flood damage that would occur on an annualized basis with the levees present.

Regarding the flood damages with the Sny levees in place (*i.e.* in the event of a levee breach), Pinter applied the probability of a levee breach for each flood scenario which produced a damage number for each scenario that reflected the possibility the levee would fail during that flood event. To produce a “net” levee benefit number, which reflects levee benefit reduced by the harm in the event of a levee failure, Pinter subtracted the annualized flood damages “with levees” from annualized flood damage “without levees.”

David Brookings’s experience calculating flood damage to railroad property includes using his engineering judgment and experience to make cost estimates for repairing flood damage even before flood waters receded below the top of the rail. His experience includes making judgments as to whether work was needed to repair bridges and other openings in railroad embankments and estimating the cost of such work. Moreover, Brookings has experience comparing cost estimates to the actual cost of performing such work after the work was completed.

David Brookings learned how to repair track structures and signals

through on-the-job training with the railroad. Throughout Brookings's career, upper management relied on his judgment regarding repairs that were needed to get the railroad back in service after flooding and the cost of making such repairs. Additionally, Brookings has experience conducting due diligence on rail lines his employer was looking at purchasing, which consisted of making repair and maintenance cost estimates.

During flood events, Brookings regularly patrolled railroad tracks while floodwaters were rising, inspecting for damage and making sure the track was safe for trains to operate over. Brookings could not patrol a railroad track once the water was more than two feet over the track. However, once the floodwaters receded below that level, Brookings could resume patrolling the track and inspecting for damage that would need to be repaired before train service could be restored. Brookings has experience patrolling railroad track in a hi-rail vehicle as floodwaters were rising on both sides of the railroad right-of-way. He has also patrolled railroad track in a hi-rail vehicle as floodwaters came up just one side of the track.

David Brookings has observed numerous instances in which a railroad

embankment in an un-leveed floodplain was flooded by waters that rose on both sides of the embankment. Brookings has also observed numerous instances in which a railroad embankment was flooded by water that approached the embankment from one side only. Accordingly, Brookings has seen the differences in the type of damage that results depending upon how the floodwater rises.

In situations in which the floodwaters approach a railroad embankment from one side, the “headwater” on one side is significantly higher than the “tailwater” on the other side and the water cascades over the top of the embankment in a pattern known as “overtopping flow” or “free flow.” Free flow results in scouring action that begins at the toe of the embankment on the downstream side and works its way up, thereby causing significant damage to a railroad embankment. The Sny’s experts agree that the greater the difference between headwater and tailwater elevations in an overtopping situation, the greater the damage will be to an embankment.

Another type of damage that can occur when floodwaters approach a



railroad from one side only is “contraction scour,” which occurs around bridge ends as water ponds on one side of the embankment and then moves through bridge openings. Brookings has observed damage caused by contraction scour during his career. This kind of damage is depicted in a video which was presented during the trial, wherein floodwater flowed through bridge openings in the Norfolk line after the 1993 breach of the Sny levee.

In cases in which floodwaters rise on both side of an embankment, as in the case of floodwater entering an un-leveed floodplain, the elevation of the headwater and tailwater is similar, resulting in a flow pattern known as “submerged flow.” When there is submerged flow after floodwaters rise on both sides of an embankment, the erosion pattern begins at the shoulder of the embankment and works its way down, meaning that damage in such a case is generally limited to some movement of the ballast. Brookings testified that although some contraction scour can occur around bridge ends when water rises on both sides of the embankment, the damage is generally limited because the similar elevation of the headwater and tailwater means

there are relatively low water velocities. Brookings has observed waves in flooded areas around railroad embankments but he has never seen waves cause any damage to an embankment.

David Brookings testified that one item of damage that may occur after any flood event regardless of how the water enters the floodplain is debris being deposited on the railroad right-of-way. However, only debris that is actually fouling the track is removed and not debris that is along the embankment. The debris is merely set on the downstream side of the track, not burned or buried.

Brookings testified that ballast cleaning is not always necessary after a flood event, even if there may be some mud in the ballast and ballast cleaning is only required if the geometry of the track is affected by fouled or dirty ballast. The Norfolk did not have to do any track undercutting (which involves removing and replacing ballast), shoulder ballast cleaning, or surface cleaning of track in the Sny after the 1993 levee breach. Even when ballast or part of an embankment is washed away by a flood, the rail is rarely lost and most of the ties and plates are not lost. The Norfolk did

not have to replace any rail along its tracks in the Sny after the 1993 levee breach and it had to replace only a few ties and tie plates.

(2)

For the purpose of his analysis in this case, David Brookings traveled the length of each of the Railroads' right-of-ways within the District's boundaries by hi-rail vehicle and got out of the vehicle at various points to examine the railroad embankment, rip-rap, culverts, signals and bridges.

According to Dr. Pinter's modeling, in no-levee scenarios, the KC's railroad tracks would have a few inches of water above the rail and the Norfolk's tracks would have about 1-2 feet of water above the rail during severe flood events. In levee-breach scenarios, both Railroads would have several feet of water above the rail during severe flood events. David Griffith, a former Assistant Division Engineer with the Norfolk, testified that water was 3-4 feet above the Norfolk's rail after the 1993 Sny levee breach.

Regarding water velocities, Dr. Pinter's modeling showed maximum average velocities in the areas around the railroad embankments from 1-4

feet per second, with the highest velocities occurring around bridges and other openings. Brookings used water velocities from Pinter's modeling to identify areas on the railroad right-of-way where there would be the most damage. However, he had to use his own judgment regarding the maximum water velocities at these locations because the values reported by Pinter's model were merely an average maximum velocity over a 50 x 50 meter grid.

In making his judgment as to damage to railroad right-of-way from water moving through bridge openings in a levee-breach situation, Brookings assumed maximum velocities consistent with what was depicted in David Griffith's video. Brookings testified Griffith's video showed flood water moving parallel to the railroad embankment at a speed of 4 to 6 feet per second and water moving through the bridge at a speed of 6 to 10 feet per second. In making his judgment as to damage to railroad right-of-way from water moving through bridge openings in a no-levee situation, Brookings assumed water velocities on the order of 1 to 3 feet per second. The Sny's rebuttal expert, Gary Dyhouse, agreed that the water velocities at bridge and culvert openings would be higher than what was shown by Pinter's modeling

and that it was reasonable for Brookings to assume water velocities at these locations higher than the maximum water velocities shown in Pinter's report.

To estimate damages to railroad properties under various flood scenarios, David Brookings estimated damages in the following categories: debris removal, track inspection, bridge inspection, embankment restoration, rip rap replacement or addition, timber tie replacement, ballast replacement, shoulder ballast cleaning, surfacing and regulating, and signal repair or replacement. Brookings showed labor and manual costs for each category of damages, such as the number of laborers and the amount of time it would take for debris removal and the amount and location of ballast needed to repair the railroad lines.

The damages Brookings calculated for various flood events can be plotted as a curve on a graph and represents a depth-damage curve even though Brookings presented the data in tabular form rather than as a graph. Brookings based his damage estimates on the state of each railroad as it exists today, making no assumptions about modifications that might be

made if the levees were not in place.

There was testimony that because the Norfolk armored significant parts of its embankment with shot rock and replaced several wood piling bridges with steel piling bridges after the 1993 flood, a similar event would not cause the same damage as in 1993.

David Brookings used the same calculus Dr. Pinter used to annualize his damage estimates for railroad properties. Like Pinter, Brookings calculated one number that represents annualized flood damages for railroad properties “without levees” (the “gross” benefit) and another number that represents annualized flood damage “with levees” and then produced a “net” benefit by subtracting flood damages “with levees” from flood damages “without levees.” Brookings calculated flood damages “with levees” for railroad properties using the levee failure probability rate used by Pinter.

(3)

For commercial and industrial properties other than railroads, pipelines and utilities, Dr. Pinter calculated an aggregate gross benefit of \$329,661 and an aggregate net benefit of \$127,019. For pipelines, Pinter

calculated an aggregate gross benefit of \$240,000 and an aggregate net benefit of \$209,563. For utilities, Pinter calculated an aggregate gross benefit of \$198,825 and an aggregate net benefit of \$74,400. For residential properties, Pinter calculated an aggregate gross benefit of \$1,911,079 and an aggregate net benefit of \$1,154,178. For agricultural properties, Pinter calculated an aggregate gross benefit of \$55,879,969 and an aggregate net benefit of \$47,409,596.

For railroad properties, David Brookings calculated an aggregate gross benefit of \$139,017 (\$27,592.79 for the KC and \$111,424 for the Norfolk) and an aggregate net benefit of -\$139,697 (-\$43,982 for the KC and -\$95,715 for the Norfolk).

(4)

The Railroads retained Donna Smith to compare the benefits and assessments for various categories of property in the Sny. Smith is a certified public accountant who has more than 30 years of experience in business valuation, forensic accounting and litigation support, and her experience includes analysis and court testimony in employment

discrimination cases in which she gathered and analyzed data for the purpose of comparing the treatment of one group in comparison to another.

For the purpose of her comparison of the assessments and benefits of various categories of properties in the Sny, Smith calculated the dollar amount of benefit received for each dollar of additional assessment for each category of property by dividing the estimated benefits for each category by the amount the Sny assessed against that category of property.

For most categories of property, including railroads, pipelines, utilities, other commercial and industrial, agricultural and residential, Donna Smith used the benefit numbers calculated by Dr. Pinter and David Brookings. For the remaining properties—not-for-profits, vacant lots and wetlands/woodlands—she used the benefits calculated by the Klingner firm.

The assessment amounts Smith used were the amounts each property owner would pay if the assessments were paid in five annual installments. The amounts of the additional assessment if paid in one installment are 87.9% of the amount of assessments if paid in five annual installments.

According to Donna Smith, the Railroads receive no net benefit for



each dollar of additional assessment and actually lose \$0.63. The pipelines and utilities receive a net benefit of \$1.38 per dollar of benefit for each dollar of additional assessment. Additionally, commercial and industrial properties receive \$4.05 of net benefit for each dollar of additional assessment. Smith found that, on a net basis, commercial and industrial properties excluding railroads, pipelines and electric utilities receive at least 405 times greater benefit than the Railroads.

According to Smith's analysis, on a gross basis, the Railroads receive a benefit of \$0.63 for each dollar of additional assessment; pipelines and electric utilities receive a benefit of \$2.14 for each dollar of additional assessment, and other commercial and industrial properties receive a benefit of \$10.51 for each dollar of additional assessment.

Based on Dr. Pinter's and David Brookings's benefits numbers, if the Railroads were taxed at a rate that would give them \$10.51 of gross benefit per dollar of assessment, which would place them in parity with commercial and industrial properties excluding railroads, pipelines and electric utilities, the KC's additional assessment if paid in five annual installments would be

\$2,625.38 and the Norfolk's assessment would be \$10,601.71. If paid in one installment, the KC's assessment would be \$2,307.71 and the Norfolk's additional assessment would be \$9,318.90.

Donna Smith's analysis suggests that interstate pipelines and utilities were treated differently than locally-owned "other commercial and industrial properties" in that pipelines and utilities had very large assessments with relatively small benefits, whereas "other commercial and industrial properties" had assessments much closer to their benefits. Smith testified that pipelines and utilities cannot be included in a comparison of railroads to other commercial and industrial properties without distorting the results because of the difference in how pipelines and electric utilities are treated by the Sny compared to other commercial and industrial properties. She further testified that if pipelines and utilities are included with other commercial and industrial properties (excluding the Railroads only), the gross benefit-per-dollar of assessment received by all commercial and industrial properties except railroads is \$3.24, or a little more than five times the gross benefit received by the Railroads, and the net benefit

received by such properties is \$1.74, which is at least 174 times greater than the net benefit received by the Railroads.

Assuming the validity of the foregoing numbers, if the Railroads were taxed at a rate that would give them \$3.24 of gross benefit per dollar of assessment, which would be consistent with commercial and industrial properties including pipelines and electric utilities, the KC's assessment if paid in five annual installments would be \$8,516.29 and the Norfolk's assessment would be \$34,390.12. If paid in one installment, the KC's assessment would be \$7,485.12 and the Norfolk's assessment would be \$30,228.92.

If David Brookings's gross benefit numbers were used, the assessment-to-benefit ratio for railroads effectively would be 140% rather than the 25.3% that Sny claims to use, based on KA's benefit numbers for the Railroads. If Brookings' gross benefit numbers were multiplied by 25.3%, the KC's additional assessment would be \$6,980.98 and the Norfolk's assessment would be \$28,190.27.

## VI. CONCLUSIONS OF LAW

As noted earlier, the Sny levees are 84-99 levees which must comply with extensive Corps and FEMA standards. The Corps inspects the levees and reports back to FEMA to ensure compliance.

Additional assessments are authorized by the Illinois Drainage Code. Improved property may be taxed according to the benefit received. *See Koeller*, 653 F.3d at 512. It is worth noting, once again, the difficulty of determining with any degree of precision the amount of benefit for a particular property. The most appropriate means of measuring the benefit and the conclusions which might be drawn from any number of factors and extensive data are matters over which reasonable minds may disagree. *See Dennis*, 58 Ill. App.2d at 474; *Leonard*, 244 Ill. at 439.

The Court concludes that the Railroads have not shown that Sny's methodology in levying an additional assessment was discriminatory.

The Railroads did not use the HEC-RAS for their flood modeling. The HEC-RAS is recognized by the Corps, which inspects the Sny levees, as well as FEMA, which accredits the Sny levees. Instead, the Railroads used SOBEK, a computer-based hydraulic simulation, that is not used by the

Corps and not recognized by FEMA.

There are other problems with the Railroads' determination of benefits. Based on their hydrologic modeling, Dr. Pinter's group concluded that in a 100-year flood event without the levees, water levels on the Mississippi River would be significantly lower. The group also determined that if the levees were not present, the Railroads would have much lower water depths in large flood events.

The problem with that aspect of the analysis is that the issue is not whether levees should be built. Given that the Sny levees have existed for more than 100 years and are authorized by state and federal law, the question of the benefits of having levees versus not having levees was addressed long ago. There are no proceedings to remove the Sny levees. Accordingly, this approach is not consistent with Corps methodology.

Additionally, Dr. Pinter's conclusions regarding much lower flood levels in a no-levee situation are inconsistent with a Corps study performed in 1995. The Corps examined flood depths without the levees assuming both a continuation of agricultural use and a reversion to natural, pre-levee

land use. All levees were removed, both in the Sny and above and below. Because only the 1993 flood was used, the changes in water surface elevations can be considered maximums. Gary Dyhouse summarized the extensive study in his report and testimony. Regarding natural or pre-levee land uses, the Corps found that the average change of flood levels from removal of the levees at various gauges in the Sny was minimal. It ranged from +1.1 feet to -1.0 feet, and averaged +0.22 feet. This is inconsistent with the Pinter group's conclusions.

Another problem with the no-levee scenario is that it assumes all of the of the farmers in the Sny would continue to return to plant every year, even though Dr. Pinter's modeling showed 75-85% of the ground would be covered with water in a 2-year flood, and up to 90% would be covered in a 5-year flood. Although he initially was reluctant to answer a hypothetical and stated that he used a mathematical formula to determine the benefit, Pinter acknowledged his model assumed farmers would continue to return to plant on ground that was repeatedly flooded. Accordingly, the no-levee modeling assumed that the farmers in the Sny would return to plant every

year, despite the likelihood that (1) most of the farmers would be flooded every other year or more; and (2) most of the flooding would occur at the beginning of growing season. Because it is unlikely that most farmers would behave in this manner, the amount of damages in a no-levee scenario is overstated.

The same assumption is made with regard to the residential properties and commercial properties. As Gary Dyhouse testified, these assumptions serve to significantly increase Pinter's concluded annual flood damages to both the residential and local commercial properties which, in all likelihood, would not consistently be rebuilt following frequent flood events.

Additionally, the flood modeling of Dr. Pinter's group is not consistent with Corps standards. It uses the results of the SOBEK flood modeling in the "with levee" and "without levee" scenarios for the 2, 5, 100 and 400-year events. Pinter did not evaluate the potential damages of any flood events between the 5 and 100-year floods.

Unlike KA, moreover, Pinter's group did not use a Monte Carlo analysis to run thousands of potential scenarios to statistically derive the

estimated annual damages. Rather, after obtaining the Hazus estimates of potential damages at the four flood scenarios, Pinter's group used a calculus equation to find averages between the four scenarios they considered and calculated the annual damages based only on those four points. Gary Dyhouse, the former Corps engineer, testified this approach is not currently accepted by the Corps or in the industry because the Monte Carlo approach provides a much more comprehensive damage analysis.

On behalf of the Railroads, David Brookings estimated the damages under the levee-breach and no-levee scenarios. For his analysis, Brookings relied on flood modeling data and other data relating to flood velocities provided to him by Pinter and/or his associates. Based upon Pinter's definitions of levee benefits and data regarding water depths and velocities and levee failure probabilities, Brookings estimated substantially higher damages in the levee-breach scenarios for both Railroads, concluding that the annualized levee protection benefit from the Sny levees for the Norfolk was a negative number, or \$-96,657. He opined that the benefit for the KC was also negative, or \$-43,982.



Although Brookings is a licensed professional engineer, he is not a hydraulic engineer. Brookings did no flood modeling and has no experience determining levee benefits to any property. Brookings testified he is not familiar with the Drainage Code, the construction of the Sny levees, or the Corps and FEMA standards regarding levee construction and maintenance.

Significantly, David Brookings's prior cost estimation work is limited to estimating the cost of repairing damages to a railroad after those damages have occurred. Brookings has never done what he was enlisted to do in this case—estimate the damages that might occur to a railroad under a flood event. He has never before attempted to estimate the damages that might occur in a hypothetical situation or the costs to repair damages that have not yet occurred.

The Court earlier noted problems with Dr. Pinter's hydraulic modeling. Like Pinter, Brookings did not run a Monte Carlo statistical analysis of his concluded damages. Moreover, because much of Brookings's work depends on Pinter's data and conclusions, these deficiencies undermine Brookings's conclusions.

Additionally, the Court finds that Brookings's lack of experience with respect to predicting the impact of water under different scenarios and his lack of deep knowledge concerning the applicable regulations and standards is significant. Accordingly, the Court is unable to adopt Brookings's conclusions.

Because of these issues, the Court finds that none of the Railroads' proposed remedies is appropriate in this case.

Based on the record, therefore, the Court is unable to conclude that the District intended to discriminate against the Railroads. There is evidence that the Sny attempted to ascertain the benefit each property received by the levee repair projects included in the additional assessment. This was done so that the levee protection costs were spread upon the properties in the District in a fair and equitable manner and in proportion to the benefit received.

There may not be a means of determining benefits and costs in a way that is entirely fair to every property in the District. Indeed, there is a significant amount of guesswork in such an endeavor. The Court does not

discount that there might be other ways of assessing properties that are as good or better.

Additionally, the Court certainly recognizes the possibility exists that a government body which levies taxes might be tempted to disproportionately assess a non-resident entity with the means to pay a higher rate. However, the Court is unable to conclude that has occurred in this case. The KA team used methods—such as the HEC-FDA program—which have been approved by the Corps and/or FEMA and are based on standards which are consistent with industry practices. It is significant that, when possible, the District has utilized methods which have been approved by the agencies which inspect and maintain the levees and/or ensure compliance with applicable standards. At times, the members of the KA team exercised professional engineering judgment if there was not an applicable program or industry practice. The Court finds that to be a reasonable approach. The engineers and other witnesses were generally credible in discussing this process.

Accordingly, the Court is unable to conclude there was any

discriminatory impact upon the Railroads from the Snyder's additional assessment. The District used an appropriate method to determine that the Railroads' assessments reflected a proportionate and just share of the District's levee protection costs included in the additional assessment. Each property in the District was assessed the exact same percentage of its annual benefit—25.30%— accruing to the property by virtue of the works and improvements funded by the special assessment.

Based on *Koeller* and *CSX II*, the Court finds that the appropriate comparison class in determining whether the District discriminated against the Railroads is the other commercial and industrial property in the District. Those are the only properties that the Court finds to be similarly situated to the Railroads.

Because the Railroads are not similarly situated to all other property owners, the District is not required to determine the benefit in a uniform manner when assessing different types of properties. It is not surprising that the benefit for agricultural or residential properties might be determined differently because “a railroad track is not the same kind of land

as the farm through which it is built.” *See Cache River Drainage Dist.*, 255 Ill. at 403. The *Sny* was permitted to take those differences into account. *See id.* was 405.

The District’s additional assessment does not discriminate against the Railroads under the 4-R Act. The *Sny* employed a uniform methodology to determine the benefits to all of the commercial and industrial properties in the District and assessed those properties in proportion to the benefits accruing to them by virtue of the District’s levees and drainage system, as it was directed to do by the Illinois Drainage Code, 70 ILCS 605/1-1, *et seq.* The Railroads have not established discrimination.

## VII. CONCLUSION

Based on the foregoing, the Court concludes that the additional assessment is not a discriminatory tax.

The Court further concludes that neither the Kansas City Southern Railway Company nor the Norfolk Southern Railway Company is entitled to injunctive relief with respect to the additional assessments.

For all of these reasons, Judgment is hereby entered in favor of

Defendant Sny Island Levee Drainage District.

Upon the entry of Judgment, the Clerk will terminate this case.

ENTER: July 17, 2015

FOR THE COURT:

*s/Richard Mills*  
Richard Mills  
United States District Judge