



Metropolitan **Planning Council**
Immeasurable Loss

Modernizing Lake Michigan Water Use
Tuesday, May 7, 2013
Noon to 1:30 p.m.

Tweet @metroplanners #waterloss

DAN INJERD

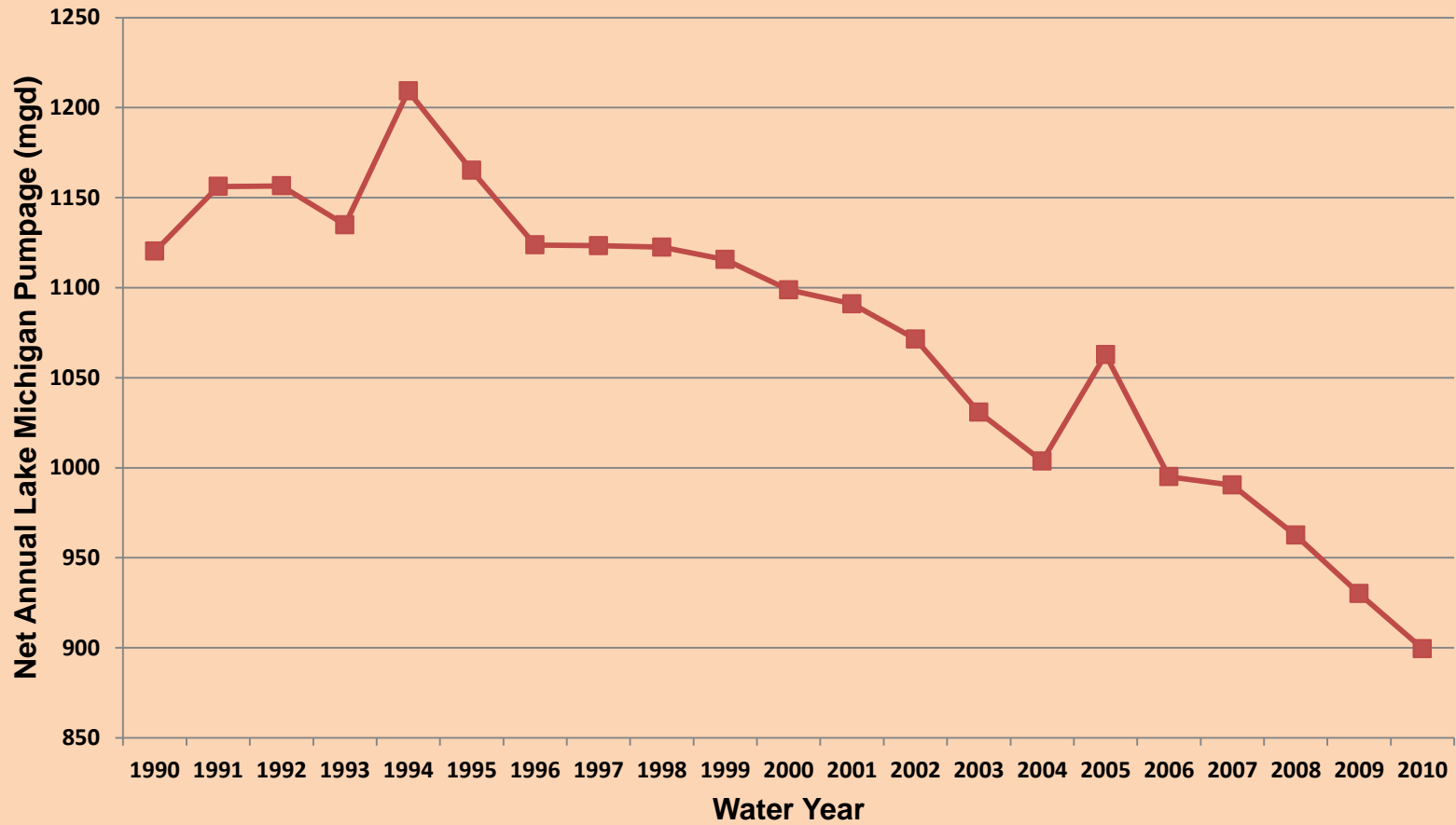
ILL. DEPT. OF NATURAL RESOURCES

Current Status of Illinois' Diversion

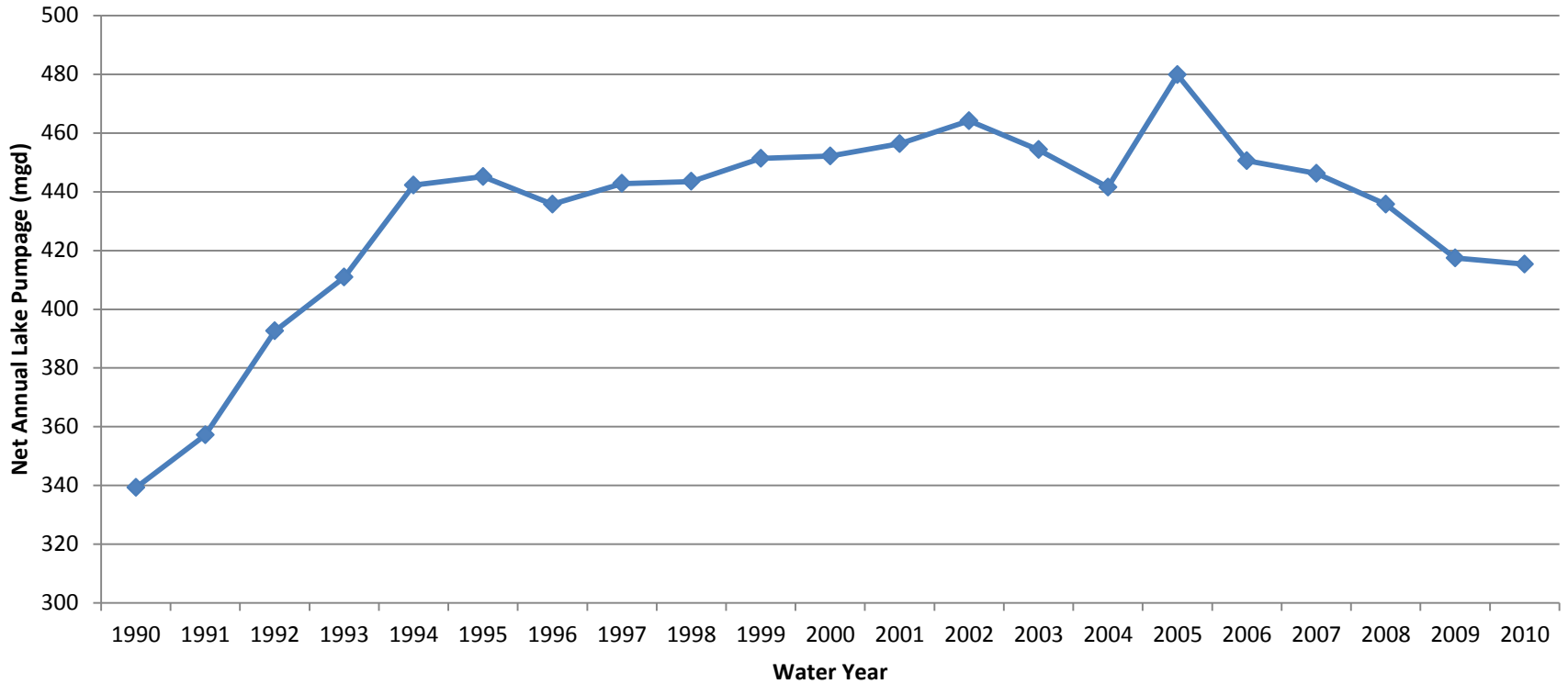
Apr-13

Accounting Year	Certified Flow (cfs)	Running Average (cfs)	Cumulative Deviation (cfs)
1981	3106	3106	94
1982	3087	3097	207
1983	3613	3269	-206
1984	3432	3310	-438
1985	3472	3342	-710
1986	3751	3410	-1261
1987	3774	3462	-1835
1988	3376	3451	-2011
1989	3378	3443	-2189
1990	3531	3452	-2520
1991	3555	3461	-2875
1992	3409	3457	-3084
1993	3841	3487	-3725
1994	3064	3456	-3589
1995	3197	3439	-3586
1996	3108	3418	-3494
1997	3114	3400	-3408
1998	3060	3382	-3268
1999	2909	3357	-2977
2000	2584	3318	-2361
2001	2698	3289	-1859
2002	2919	3272	-1578
2003	2398	3234	-776
2004	2757	3214	-333
2005	2771	3196	96
2006	2628	3174	668
2007	3094	3171	774
2008	3002	3165	972
2009	3135	3164	1037
2010*	2967	3158	1270
2011*	2838	3147	1632
2012*	2181	3117	2651

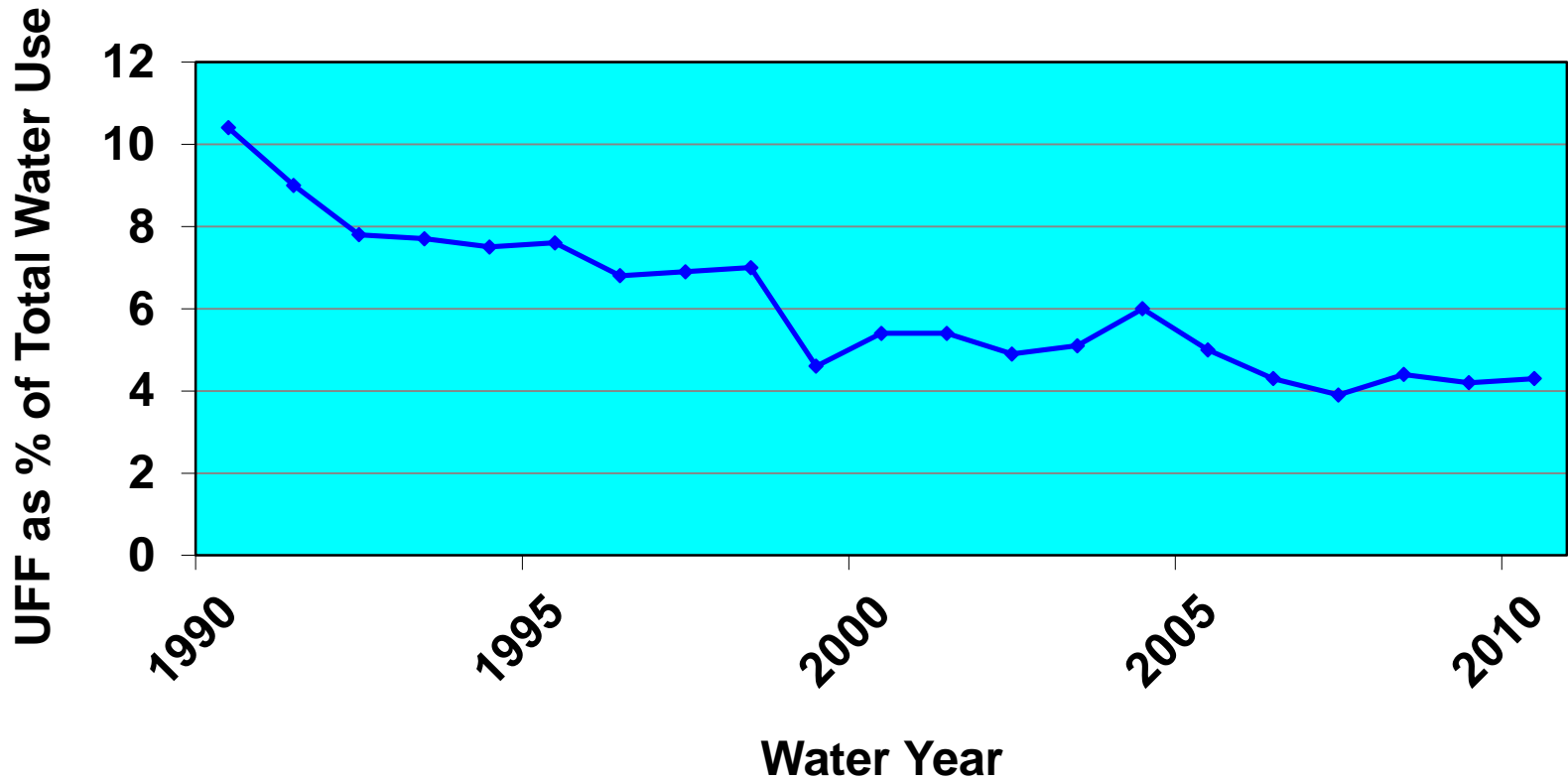
Figure 1. Illinois Lake Michigan Water Allocation Permittees' Total Annual Use



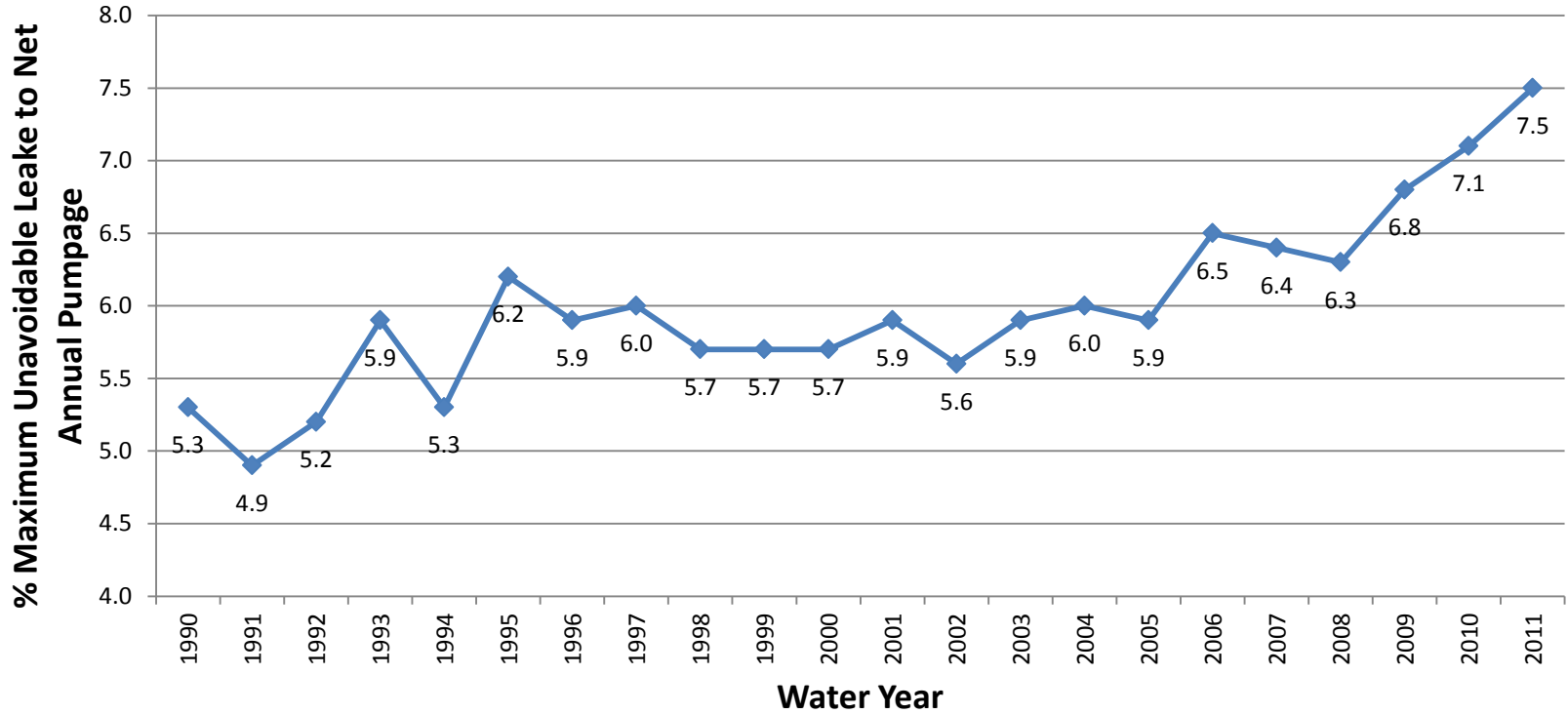
Illinois Lake Michigan Allocation Permittees w/o Chicago Annual Lake Michigan Pumpage



Average Unaccounted-For-Flow In Lake Michigan Communities



Average Regional Maximum Unavoidable Leakage



Section III - Maximum Unavoidable Leakage Worksheet

A. Cast Iron Pipes With Lead Joints

Age of Pipe	Miles of Pipe	Leakage Rate*	Maximum Unavoidable Leakage**
>60 yrs.	_____	x 3000 g/d/mi =	_____ g/d
40-60 yrs.	_____	x 2500 g/d/mi =	_____ g/d
20-40 yrs.	_____	x 2000 g/d/mi =	_____ g/d
<20 yrs.	_____	x 1500 g/d/mi =	_____ g/d

B. All Other Types of Pipes and Joints

>60 yrs.	_____	x 2500 g/d/mi =	_____ g/d
40-60 yrs.	_____	x 2000 g/d/mi =	_____ g/d
20-40 yrs.	_____	x 1500 g/d/mi =	_____ g/d
<20 yrs.	_____	x 1000 g/d/mi =	_____ g/d
 Total Miles	_____	 Total Leakage	_____ g/d

* Leakage Rate expressed in gallons per day per mile (g/d/mi)

** Maximum Unavoidable Leakage expressed in gallons per day (g/d)

MIKE RAMSEY VILLAGE OF WESTMONT

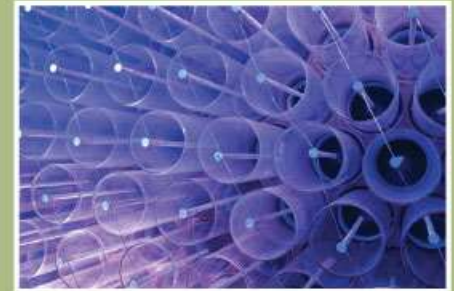


ILLINOIS
AMERICAN WATER

MPC Roundtable—Immeasurable Loss: Modernizing Lake Michigan Water Use

5/7/13

Michael Smyth
Illinois American Water - Chicago Metro District
Sr. Manager of Field Services and Production





Illinois • Major Service Areas



Highlights:

- Serve 1.2M people across Illinois
- Four Large Districts – Chicago Metro, Peoria, Champaign-Urbana, Interurban
- Chicago Metro Service Area Population = ~125,000
- 44,000 water and 32,000 wastewater customers
- Service areas include Bolingbrook, Homer Glen, and Orland Hills
- Regulated utility governed by Illinois Commerce Commission



Illinois Department of Natural Resources – Proposed Rule Changes

- **Favor full cost pricing**
- **Favor conservation measures (although we have no authority to enforce)**
- **Favor 8% limit change, however propose the 2 year timeframe be extended to 5-10 years.**
 - Eliminate allowance for age of water main.

Note: As a regulated utility governed by the Illinois Commerce Commission, our water rates reflect full cost pricing.



SUMMARY

In Illinois, the condition of our infrastructure is deteriorating. We cannot stand by and allow that to happen. Our quality of life depends on it and our citizens deserve better.

When the American Society of Civil Engineers (ASCE) released its 2009 Report Card for America's Infrastructure in January 2009, several notable points stood out. The five-year investment need was estimated to be \$2.2 trillion, an increase of \$500 billion since ASCE's last Report Card in 2005. The longer we delay investment, the higher the cost will rise.

The second point is more sobering. The current five-year outlay, including funds from the American Recovery and Reinvestment Act of 2009, covers less than 46 percent of needed investment.

Does Illinois mirror this bleak national picture?

To find out, the Illinois Sections of ASCE authored a report card for the state of Illinois. This report card brings the state's infrastructure needs to the attention of our local legislators and the public. Similar to five-key solutions included in the 2009 Report Card for America's Infrastructure, the Illinois Sections also developed five key solutions to the infrastructure crisis our state is facing.

- ★ **INCREASE** federal and state leadership in infrastructure to address the crisis. The nation's infrastructure is more than a funding issue; it is a key basis to our economy and our way of life.
- ★ **PROMOTE** sustainability and resilience in infrastructure to protect the natural environment and withstand natural and man-made hazards.
- ★ **DEVELOP** national, state and regional infrastructure plans that complement a national vision and focus on system-wide results. Doing so will more effectively marshal funds while creating solutions with efficient

"I am a firm believer in the people. If given the truth, they can be depended upon to meet any national crisis. The great point is to bring them the real facts."

-Abraham Lincoln

2010 REPORT CARD

★★★★ for ★★★★★

illinois INFRASTRUCTURE

ASCE's Report Card for Illinois



Illinois



Investment in water infrastructure will create jobs

\$1 billion
in water infrastructure
investment can support

▶ 28,500 jobs

\$190 billion
in private capital for infrastructure is available

Every \$1 billion invested in water infrastructure results
in up to \$3.46 billion of total national output.

20 Year
job potential

▶ 926,820 jobs

1 Year
job potential

▶ 46,341 jobs

Illinois' 20 Year Water Investment Needs

Wastewater Needs
according to EPA

▶ \$17.5 billion

Drinking Water Needs
according to EPA

▶ \$15.02 billion

Combined Needs
according to EPA

▶ \$32.52 billion



Full Cost Pricing – Endorsed by United States EPA, MPC, CMAP

- **CMAP “GOTO 2040”** – *“Full cost pricing is recommended to encourage conservation and to provide fully adequate revenues for water utilities.”*
- **USEPA** – *“Pricing of water services should accurately reflect the true costs of providing high-quality water and wastewater services to consumers in order to both maintain infrastructure and plan for upcoming repairs, rehabilitation and replacement of that infrastructure.”*



ASCE 2010 Report Card

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We are in favor of the proposed changes it's the right thing to do! As water industry professionals we owe it to the residents who receive Lake Michigan water to take this important step.

Please wait for the microphone, state your name and affiliation

QUESTIONS & ANSWERS



Metropolitan **Planning** Council

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Please fill out the survey and place it in the basket as you leave. Thank you!