

# MWRA Employees' Retirement System

## Total Fund Performance Detail (Net) - Preliminary

August 31, 2015

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
<b>Composite</b>	<b>443,504,054</b>	<b>100.0</b>	<b>100.0</b>	<b>-3.7</b>	<b>-3.9</b>	<b>-1.3</b>	<b>-1.9</b>	<b>8.2</b>	<b>8.7</b>	<b>6.5</b>		<b>Jan-86</b>
Allocation Index				-3.7	-3.1	-0.7	-0.6	7.5	8.4	5.5	--	Jan-86
Policy Index				-3.9	-3.3	-0.5	-0.9	7.5	8.8	5.8	--	Jan-86
<b>Total Balanced</b>	<b>69,872,404</b>	<b>15.8</b>	<b>16.0</b>	<b>-4.4</b>	<b>-5.4</b>	<b>-3.2</b>	<b>-8.2</b>	<b>3.0</b>	<b>--</b>	<b>--</b>	<b>3.1</b>	<b>Dec-10</b>
PRIT Core Fund	2,810,143	0.6		-3.5	-3.0	-0.7	-0.5	8.9	9.2	5.9	6.3	Apr-99
60% S&P 500 / 40% BC Agg				-3.7	-2.2	-1.4	1.1	9.2	10.8	6.4	5.1	Apr-99
Wellington Opportunistic Investment	25,888,927	5.8	6.0	-4.0	-4.5	0.3	-4.2	5.6	4.9	--	8.6	Nov-08
65% MSCI ACWI (Net) / 35% BC Agg				-4.5	-3.7	-2.0	-3.5	6.7	7.5	5.3	8.8	Nov-08
PIMCO All Asset	23,411,550	5.3	6.0	-4.3	-5.7	-5.8	-11.7	0.2	3.3	--	8.4	Dec-08
PIMCO All Asset Index				-1.0	-0.6	0.2	-0.5	2.3	4.6	5.2	7.4	Dec-08
William Blair	17,761,784	4.0	4.0	-5.2	-6.5	--	--	--	--	--	-7.2	Mar-15
60% MSCI ACWI (Net)/40% CITI WGBI				-3.9	-3.2	-3.2	-6.7	4.5	5.9	4.7	-5.0	Mar-15
<b>Total Domestic Equity</b>	<b>95,620,300</b>	<b>21.6</b>	<b>20.0</b>	<b>-6.1</b>	<b>-4.6</b>	<b>-1.0</b>	<b>2.7</b>	<b>14.9</b>	<b>16.3</b>	<b>8.1</b>	<b>5.9</b>	<b>May-99</b>
<b>Large Cap</b>	<b>63,313,529</b>	<b>14.3</b>	<b>14.0</b>	<b>-5.9</b>	<b>-3.9</b>	<b>-2.0</b>	<b>2.5</b>	<b>14.6</b>	<b>--</b>	<b>--</b>	<b>13.6</b>	<b>Dec-10</b>
Rhumbline Advisors S&P 500 Index Fund	23,360,043	5.3	6.0	-6.0	-4.1	-2.9	0.4	14.1	15.7	7.2	7.4	Apr-97
S&P 500				-6.0	-4.1	-2.9	0.5	14.3	15.9	7.2	7.3	Apr-97
MFS Large Cap Value	19,784,529	4.5	4.0	-6.4	-4.7	-4.0	0.7	14.8	14.5	7.4	7.1	Apr-01
Russell 1000 Value				-6.0	-5.5	-6.1	-3.5	13.9	14.7	6.2	6.4	Apr-01
Intech Broad Large Cap Growth	20,168,957	4.5	4.0	-5.4	-2.8	1.0	6.7	14.8	17.4	--	15.9	Feb-10
Russell 1000 Growth				-6.1	-2.9	1.0	4.3	15.3	17.4	8.4	15.2	Feb-10
<b>Small Cap</b>	<b>32,306,771</b>	<b>7.3</b>	<b>6.0</b>	<b>-6.5</b>	<b>-6.1</b>	<b>1.0</b>	<b>2.8</b>	<b>15.4</b>	<b>--</b>	<b>--</b>	<b>13.8</b>	<b>Dec-10</b>
Robeco Boston Partners Small Cap Value	15,639,706	3.5	3.0	-4.4	-5.6	-1.9	-2.5	13.8	15.3	7.9	11.1	Feb-97
Russell 2000 Value				-4.9	-7.5	-6.8	-4.9	11.8	13.2	5.7	8.8	Feb-97
Loomis Sayles Small Cap Growth	16,667,065	3.8	3.0	-8.5	-6.5	3.9	8.4	16.9	19.1	10.7	5.2	Jan-97
Russell 2000 Growth				-7.6	-7.2	0.9	5.1	16.5	17.8	8.5	6.3	Jan-97
<b>Total International Equity</b>	<b>70,426,119</b>	<b>15.9</b>	<b>17.0</b>	<b>-7.4</b>	<b>-9.0</b>	<b>-5.5</b>	<b>-13.1</b>	<b>6.3</b>	<b>3.7</b>	<b>2.4</b>	<b>3.8</b>	<b>Mar-99</b>
Schroder International Alpha Fund	25,983,199	5.9	6.0	-7.4	-6.8	-1.6	-8.3	7.3	--	--	4.6	Mar-12
MSCI EAFE				-7.4	-5.4	-0.2	-7.5	8.5	7.0	4.0	6.0	Mar-12
The Boston Company	24,576,662	5.5	6.0	-7.7	-6.5	-0.2	-9.6	7.7	4.1	2.7	2.7	Sep-05
MSCI EAFE				-7.4	-5.4	-0.2	-7.5	8.5	7.0	4.0	4.0	Sep-05

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<b>Emerging Markets Equity</b>	<b>19,866,257</b>	<b>4.5</b>	<b>5.0</b>	<b>-7.1</b>	<b>-14.9</b>	<b>-15.9</b>	<b>-22.5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-9.1</b>	<b>Nov-13</b>
Lee Munder Emerging Market Equity	19,866,257	4.5	5.0	-7.1	-14.9	-15.9	-22.5	--	--	--	-9.5	Dec-13
<i>MSCI Emerging Markets</i>				-9.0	-15.3	-12.9	-22.9	-2.4	-0.9	5.5	-9.5	Dec-13
<b>Total Fixed Income</b>	<b>98,581,018</b>	<b>22.2</b>	<b>22.0</b>	<b>-1.1</b>	<b>-1.5</b>	<b>-2.4</b>	<b>-3.7</b>	<b>3.4</b>	<b>5.4</b>	<b>6.3</b>	<b>7.1</b>	<b>Mar-99</b>
Invesco Core Bonds	44,492,775	10.0	10.0	-0.6	-0.1	-0.2	0.2	2.0	3.8	5.0	5.3	Dec-98
<i>Barclays Aggregate</i>				-0.1	0.6	0.4	1.6	1.5	3.0	4.5	5.1	Dec-98
Loomis Sayles - Multi Sector Bonds	52,682,685	11.9	12.0	-1.5	-2.6	-4.0	-6.9	4.0	6.3	7.0	8.4	Mar-99
<i>Barclays Aggregate</i>				-0.1	0.6	0.4	1.6	1.5	3.0	4.5	5.2	Mar-99
<i>Barclays High Yield</i>				-1.7	-2.3	0.2	-2.9	4.9	7.3	7.4	6.9	Mar-99
Invesco Mortgage Fund	1,405,558	0.3		0.0	0.0	0.0	22.3	11.8	13.2	--	20.3	Apr-10
<i>Barclays Aggregate</i>				-0.1	0.6	0.4	1.6	1.5	3.0	4.5	3.8	Apr-10
<b>Total Hedge Fund</b>	<b>39,874,722</b>	<b>9.0</b>	<b>9.0</b>	<b>-2.4</b>	<b>-2.2</b>	<b>-0.6</b>	<b>-1.2</b>	<b>6.3</b>	<b>5.0</b>	<b>--</b>	<b>3.6</b>	<b>Oct-06</b>
PRIM Absolute Return Fund	18,105,678	4.1	5.0	-2.5	-2.1	0.4	1.4	7.3	5.7	--	4.0	Oct-06
<i>HFRI Fund of Funds Composite Index</i>				-2.0	-1.8	0.9	1.6	5.1	3.5	2.8	2.1	Oct-06
Permal Fixed Income Holdings	10,659,007	2.4	2.0	-2.0	-1.7	-0.7	-2.6	6.0	--	--	6.1	Oct-11
<i>HFRI Fund of Funds Composite Index</i>				-2.0	-1.8	0.9	1.6	5.1	3.5	2.8	4.4	Oct-11
EnTrust	11,110,037	2.5	2.0	-2.5	-2.9	-2.3	-4.1	4.8	--	--	4.6	Jan-12
<i>HFRI Fund of Funds Composite Index</i>				-2.0	-1.8	0.9	1.6	5.1	3.5	2.8	4.9	Jan-12
<b>Other</b>	<b>5,214,761</b>	<b>1.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.4</b>	<b>0.2</b>	<b>--</b>	<b>--</b>	<b>0.1</b>	<b>Dec-10</b>
Cash Account	5,214,761	1.2		0.0	0.0	0.1	0.4	0.2	0.1	1.5	2.1	Feb-00
<i>91 Day T-Bills</i>				0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.7	Feb-00
<b>Total Real Estate</b>	<b>30,536,329</b>	<b>6.9</b>	<b>7.0</b>	<b>-0.4</b>	<b>0.0</b>	<b>5.3</b>	<b>12.0</b>	<b>14.6</b>	<b>12.6</b>	<b>6.8</b>	<b>7.5</b>	<b>Apr-99</b>
PRIT Core Real Estate	13,510,189	3.0		-0.9	0.1	5.0	10.0	11.6	12.5	--	12.7	Jul-10
Morgan Stanley Prime Property	6,653,659	1.5		0.0	0.0	7.3	17.1	15.0	15.5	7.6	8.6	Sep-95
Intercontinental Real Estate Investment Fund IV	206,310	0.0		0.0	0.0	9.0	24.8	11.2	8.8	-5.2	-6.3	Jun-05
Landmark VI (\$2m commitment in '11)	1,039,053	0.2		0.0	0.0	3.6	10.4	17.7	--	--	16.3	Jul-11
Mesirow MFire Global (\$2m commitment in '11)	1,327,538	0.3		0.0	0.0	0.1	4.4	8.3	--	--	0.3	May-12
Cerberus (\$1.5m commitment in '12)	1,539,101	0.3		0.0	0.0	5.5	14.2	--	--	--	17.8	May-13
Realty Associates Fund X LP (\$3.5m commitment in '12)	3,650,215	0.8		0.0	0.0	5.1	11.5	--	--	--	9.5	May-13
TerraCap Partners III (Institutional), LP	2,610,264	0.6										
<i>NCREIF Property Index 1 Qtr Lag</i>												

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	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
<b>Total Private Equity</b>	<b>33,378,401</b>	<b>7.5</b>	<b>9.0</b>	<b>0.0</b>	<b>0.0</b>	<b>9.5</b>	<b>21.1</b>	<b>17.3</b>	<b>15.1</b>	<b>10.8</b>	<b>8.8</b>	<b>Apr-99</b>
PRIM Vintage Year 2008 (\$3m commitment in '08)	1,885,734	0.4		0.3	0.0	8.4	17.3	21.8	20.6	--	2.9	Jun-08
PRIM Vintage Year 2009 (\$1m commitment in '09)	309,950	0.1		0.0	-1.0	10.9	23.0	22.0	12.5	--	-0.5	Nov-09
PRIM Vintage Year 2010 (\$1m commitment in '10)	757,128	0.2		0.1	-0.2	12.2	19.9	20.6	2.8	--	1.7	Jun-10
PRIM Vintage Year 2011 (\$1.5m commitment in '11)	967,420	0.2		0.0	-0.6	16.1	24.9	13.4	--	--	-11.0	May-11
PRIM Vintage Year 2012 (\$1m commitment in '12)	455,382	0.1		0.7	-0.1	9.8	15.6	11.4	--	--	-45.8	Jun-12
PRIM Vintage Year 2014 (\$2m commitment in '14)	297,844	0.1		-0.5	-2.2	-5.3	-8.5	--	--	--	-43.6	Jun-14
Alcentra European DLF (\$5m commitment in '14)	4,736,363	1.1		0.0	0.0	7.2	--	--	--	--	7.2	Jan-15
Ascent Fund II	85,160	0.0		0.0	0.0	-0.4	15.4	18.4	20.3	13.0	13.9	Jan-99
Ascent Fund IV (\$2m commitment in '04)	744,789	0.2		0.0	0.0	-35.5	-39.8	-10.3	-11.8	-6.0	-5.7	Jul-04
Ascent Fund V (\$2m commitment in '08)	2,064,826	0.5		0.0	0.0	-0.4	0.4	18.5	13.7	--	7.9	Oct-08
Boston Capital	17,686	0.0		0.0	0.0	0.0	0.0	-9.1	8.0	17.2	9.3	Apr-99
Castile Ventures III, L.P. (\$3m commitment in '07)	1,304,499	0.3		0.0	0.0	-0.1	-2.1	-8.0	-6.4	--	-8.4	Jan-08
Invesco Fund IV (\$3m commitment in '03)	1,541,454	0.3		0.0	0.0	0.2	13.0	17.0	18.4	15.1	11.2	Feb-04
Invesco Fund VI (\$5m commitment in '13)	3,172,605	0.7		0.0	0.0	4.1	24.6	--	--	--	16.0	Jul-13
Foundry 2007 (\$3m commitment in '07)	7,512,111	1.7		0.0	0.0	46.6	108.1	42.2	30.3	--	39.8	Dec-07
Foundry 2010 (\$3m commitment in '10)	3,398,896	0.8		0.0	0.0	-0.8	9.9	17.9	--	--	11.9	Jan-11
Pinebridge PEP V (\$6m commitment in '07)	3,473,356	0.8		0.0	0.0	3.4	8.2	12.3	11.0	--	3.9	Mar-08
Landmark XV (\$3m commitment in '13)	653,200	0.1		0.0	0.0	9.2	2.4	--	--	--	18.3	Nov-13

### Notes:

- 1 - Results for periods longer than one year are annualized.
- 2 - Total Balanced, Large Cap, Small Cap, and Other Composite performance starts 12/1/2010.
- 3 - Fiscal YTD begins July 1st.
- 4 - Preliminary Total Composite gross of fee since inception return is 8.6% for the month of current month.
- 5 - Market values for Real Estate, with the exception of PRIT Core Real Estate, are as of 3/31/2015 adjusted for cash flows. PRIT Core Real Estate's market values are as of the current month.
- 6 - Market values for Private Equity managers, with the exception of PRIM Vintage Year accounts, are as of 3/31/2015 adjusted for cash flows. PRIM Vintage Year accounts market values are as of the current month.

## Information Disclaimer and Reporting Methodology

### Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
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### Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.