



# DuPage Water Commission

600 E. Butterfield Road, Elmhurst, IL 60126-4642  
(630)834-0100 Fax: (630)834-0120

## AGENDA

**ENGINEERING & CONSTRUCTION COMMITTEE**  
**THURSDAY, DECEMBER 15, 2011**  
**6:30 P.M.**

**600 EAST BUTTERFIELD ROAD**  
**ELMHURST, IL 60126**

## COMMITTEE MEMBERS

D. Loftus, Chair  
R. Furstenau  
F. Saverino  
M. Scheck

- I. Roll Call
- II. Approval of Committee Meeting Minutes

**RECOMMENDED MOTION: To approve the Minutes of the November 17, 2011 Engineering & Construction Committee Meeting of the DuPage Water Commission.**

- III. Report of Status of Construction/Operations
- IV. Discussion Items
- V. Old Business
- VI. Other
- VII. Adjournment

Board\Agendas\Engineering\2011\1112.docx

All visitors must present a valid drivers license or other government-issued photo identification, sign in at the reception area and wear a visitor badge while at the DuPage Pumping Station.

**MINUTES OF A MEETING OF THE  
ENGINEERING & CONSTRUCTION COMMITTEE  
OF THE DUPAGE WATER COMMISSION  
HELD ON THURSDAY, NOVEMBER 17, 2011  
600 EAST BUTTERFIELD ROAD  
ELMHURST, ILLINOIS**

The meeting was called to order at 6:30 P.M.

Committee members in attendance: R. Furstenau, F. Saverino, M. Scheck and D. Loftus

Committee members absent: None

Also in attendance: R.C. Bostick, E. Kazmierczak, J. Schori, and M. Weed.

After Facilities Construction Supervisor Bostick noted that a revised version of the October 20 Committee Minutes had been placed at each Commissioner's desk before the meeting, Commissioner Scheck moved to approve the Minutes of the September 15, 2011 Engineering & Construction Committee Meeting of the DuPage Water Commission and to approve the Minutes of the October 20, 2011 Engineering and Construction Committee of the DuPage Water Commission, as revised. Motion seconded by Commissioner Furstenau and passed unanimously as follows:

Ayes: R. Furstenau, F. Saverino, M. Scheck and D. Loftus  
Nays: None

Facilities Construction Supervisor Bostick provided an oral report highlighting the Status of Operations report;

Regarding Water Conservation, Commissioner Furstenau indicated that the information provided seems to be unchanged from month to month and inquired as to the status of the program and whether the program is being fully promoted or the efforts have run their course. Chairman Loftus echoed Commissioner Furstenau's point that the information being provided monthly appears to show a static program, noting however the efforts of the Commission have benefits for the public as well as provide impetus for all of the Commission's customers. Commissioner Furstenau requested Staff to prepare a status report, within 60 days, related to how each customer is benefiting from the Commission's water conservation program.

Regarding the DuPage County Steeple Run Service Area, Facilities Construction Supervisor Bostick advised that DuPage County had posted all required deposits for a "Type C" Rate Control Pressure Adjusting Station (PAS) but the Engineer has determined, through hydraulic analyses on the Commission's distribution plus head losses associated with the County's distribution system, that a "Type D" pressure increasing PAS is now necessary. Facilities Construction Supervisor Bostick noted that the County has been advised this finding will most likely increase the cost of design and

construction of the PAS facilities. Facilities Construction Supervisor Bostick also noted that because DuPage County deposits up to 125% of all associated costs upfront, all expenses are 100% the responsibility of the County, and the PAS is a County asset, the change should have a net neutral effect on the Commission's budget. Facilities Construction Supervisor Bostick further noted the Engineer continues working on the preliminary design elements including site surveys and soil borings.

Regarding R-45-11, Facilities Construction Supervisor Bostick advised Work Authorization Order # QRE-5.003 was issued, and the work started, prior to Board approval in response to IDOT's request that an existing electrical service drop to a Commission facility (ROV29A) at the intersection of Butterfield Rd and Winfield Rd in Warrenville be immediately relocated because the existing underground cable was in conflict with IDOT's proposed traffic signal mast arm foundation.

Regarding R-46-11, Facilities Construction Supervisor Bostick advised that R-46-11 would annul the award made to Joliet Equipment Corporation under R-44-11 at the October meeting and terminate the Commission's acceptance of the Joliet Contract/Proposal for failure to submit the contractually required Performance and Labor and Material Payment Bonds and would re-award the contract to Dreisilker Electric Motors, Inc. for the prices set forth in its Contract/Proposal, initially amounting to \$58,440. Facilities Construction Supervisor Bostick noted that as provided in the RFP, each Bidder's proposal included a lump sum allowance of \$50,000 for implementing any necessary work to the motor, from which the cost of implementing any Commission-approved work will be deducted but monies not expended from the allowance will not be paid by the Commission to Dreisilker Electric Motors, Inc.

Commissioner Scheck moved to recommend approval of item numbers IV and V under the Engineering & Construction Committee Agenda, all in a single group pursuant to the Omnibus Vote Procedures. Seconded by Commissioner Saverino and unanimously approved by a Roll Call Vote:

#### **Engineering Omnibus Vote**

Ayes: R. Furstenau, F. Saverino, M. Scheck and D. Loftus

Nays: None

Item IV: R-45-11: A Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Electrical Contract QRE-5/10 "Engineering Omnibus Vote"

Item V: R-46-11: A Resolution Annuling the Award to Joliet Equipment Corporation and Re-Awarding a Contract for High Lift Pump Motor Re-Build at the DuPage Pumping Station "Engineering Omnibus Vote"

Regarding Old Business, Facilities Construction Supervisor Bostick reminded the Committee that earlier in 2011, Commonwealth Edison tendered final invoices for work relating to the Lexington and DuPage generator projects. At that time, it had been suggested that insufficient back-up documentation had been supplied for the Commission to accept the invoices and tender payment. Facilities Construction Supervisor Bostick advised that numerous meetings and discussions between Staff and Commonwealth Edison have yielded positive results where the Commonwealth Edison documentation had been reviewed and some cost savings had been realized. As such, Staff is recommending that the Commonwealth Edison invoices be placed on the December 2011 Accounts Payable. After reviewing the content of the November 16, 2011 correspondence from Commonwealth Edison, it was the consensus of the Committee to place the invoices on the December 2011 Accounts Payable.

Commissioner Furstenau moved to adjourn the meeting at 7:00 P.M. Motion seconded by Commissioner Saverino and passed unanimously as follows:


Ayes: R. Furstenau, F. Saverino, M. Scheck and D. Loftus  
Nays: None



# DuPage Water Commission

## MEMORANDUM

TO: John Spatz  
General Manager

FROM: Terry McGhee   
Manager of Water Operations

Ed Kazmierczak	Pipeline Supervisor
Chris Bostick	Facilities Construction Supervisor
John Schori	Instrumentation Supervisor
Frank Frelka	GIS Coordinator
Mike Weed	Operations Supervisor

DATE: December 8, 2011

SUBJECT: Status of Operations

### Operations Overview

The Commission's sales for the month of November were a total of 1.992 billion gallons. This represents an average day demand of 66.4 million gallons per day (MGD), which is lower than the November 2010 average day demand of 68.3 MGD. The maximum day demand was 70.3 MGD on November 4, 2011, which is lower than the November 2010 maximum day demand of 70.9 MGD. The minimum day flow was 62.8 MGD. The Commission's recorded total precipitation for the month of November was 3.44 inches compared to 2.51 inches for November 2010. The level of Lake Michigan for November 2011 is 577.65 (Feet IGLD 1985) compared to 577.28 (Feet IGLD 1985) for November of 2010.

### Water Conservation

The Commission is closing out the third year of our Water Conservation & Protection Program. We are proud to report that all of our customers have a Conservation Coordinator in place and over half of them have a rain barrel display. The Commission participated in many conservation events and provided valuable resources to our customers and the community this year. A large number of our customers have gone on to either start or retool conservation programs of their own. Work will be starting next month on the 2011 Annual report which will be available in early 2012.

### Document Management

Staff has completed moving the majority of documents into the databases on the Document Management System.

Staff is in the process of creating workflows that will be utilized through DocMinder, a Document Management add-on, for board preparation procedures as well as other procedural needs.

The Commission's new leased copiers/printers have been outfitted with software that will allow employees to directly scan into the Document Management System.

Work continues to complete the document inventory that will be sent to the Secretary of State for their destruction authorization.

### **Facilities Construction Overview**

#### **Contract PSD-7 DPPS Electrical Generation**

Staff continues meeting with the design engineer to discuss outstanding design issues. The Engineer is reviewing the Contractor's cost proposals for the suggested remedial actions.

#### **Contract PSC-4 Lexington Generation Facilities**

No Change: All contractually required documentation having been submitted and approved, the final payment will be released shortly which closes the contract and marks the commencement of warranties.

#### **Contract PSC-5 Lexington Photovoltaic Cells**

No Change: The Contractor is waiting on the City to establish an internet connection in order to display the PV system data on the internet. This is the final work required before closing out the contract.

#### **Supply of Engine Generator Units**

No Change: We are working with Patten Power on a potential change order to credit the Contract for spare generator parts which we no longer wish to store.

#### **DuPage County Service Areas**

**Steeple Run:** No Change: DuPage County has posted all required deposits for a "Type C" Rate Control Pressure Adjusting Station (PAS). The Engineer has determined through hydraulic analyses on the Commission's distribution plus head losses associated with the County's distribution system that a "Type D" pressure increasing PAS is necessary. This will most likely increase the cost of design and construction of the PAS facilities. Since DuPage County deposits up to 125% of all associated costs upfront and all expenses are 100% the responsibility of the County, as well as the PAS

being a County asset, this should have a net neutral effect on the Commission's budget. This issue has been discussed with the County and is moving forward. The Engineer continues working on the preliminary design elements including site surveys and soil borings.

**York Township:** No Change: We have been requested to develop estimates to provide a direct connection to this service area. This is a precursor to developing a joint connection facility agreement.

### **Instrumentation / Remote Facilities Overview**

#### **Annual Customer Meter Calibration Program**

The program is underway and is approximately 18% complete.

#### **Remote Facilities Maintenance**

Annual remotely operated valve inspections and calibrations are complete for the year. Meter Station inspections and maintenance of facilities continues.

#### **Contract QRE-5/10 (Quick Response Electrical Contract)**

Work Authorization Order # QRE-5.002 to repair the electrical service entrances at various meter stations is being scheduled with ComEd to cut services so the work can be performed.

Work Authorization Order # QRE-5.003 to relocate the service drop to ROV29A control cabinet has been completed.

### **GIS**

#### **Infor EAM**

The Infor EAM 8.5 upgrade project is 95% complete. The only significant remaining issue has to do with the Advanced Mobile (AM) application which is used on handheld devices to perform inspections and record results. The AM application was developed by Blue Dot who is a subcontractor to Infor. The upgrade was completed with very few complaints and overall the project went well with exceptional cooperation between DWC and Infor personnel. It is anticipated the Advanced Mobile issues will be resolved soon.

#### **ArcGIS Server Web Site**

Work continues on a new GIS web site using ArcGIS Server version 10.

#### **Paperless Agenda Project**

Work continues on this project.

## **Pipeline Construction Overview**

### **Contracts TOB-7/11 and TS-8**

Work continues on project design and contract specifications for the Outer Belt Transmission Main Corrosion Mitigation Contract and the South Transmission Main Corrosion Mitigation Project (EN Engineering Task Order Nos. 13 and 6).

### **Contract QR-9 (Quick Response Contract)**

There are no active work authorizations at this time.

## **Operations Construction and Maintenance Overview**

### **High Lift Pump Motor Re-Build**

R-46-11, approved at the November 2011 meeting annulled the contract award to Joliet Equipment Corporation and awarded the contract to Dreisilker Electric Motors, Inc. for the prices of \$58,440 as set forth in their Contract/Proposal. As provided in the RFP, each Bidder's proposal includes a lump sum allowance of \$50,000 for implementing any additional necessary repair work discovered by visual inspection and electrical testing. The cost of implementing any Commission-approved additional work will be deducted from the amount of the allowance. Any monies not expended from the allowance will not be paid by the Commission to Dreisilker Electric Motors. Upon receipt of all contractually required documentation, Dreisilker is scheduled to remove, disassemble and begin testing the motor starting on December 7<sup>th</sup>.

### **High Lift Pump 2**

Two mechanical split seals were rebuilt and installed on pump 2 on November 29<sup>th</sup> and 30<sup>th</sup>.

### **Vibration Monitor Maintenance and Testing**

The Commission's Vibration monitor system used to monitor vibration on all high lift pumps and motors is scheduled for maintenance and calibration on December 8 and 9.

## **DECEMBER 2011 COMMISSION AGENDA ITEMS:**

### **Attachments:**

1. DuPage Laboratory Bench Sheets for November, 2011
2. Water Sales Analysis 01-October-06 to 30-Novemebr- 2011
3. Chart showing Commission sales versus allocations
4. Chart showing Commission sales versus historical averages



DUPAGE WATER COMMISSION LABORATORY BENCH SHEET  
MONTHLY REPORT FOR NOVEMBER 2011

LEXINGTON SUPPLY

DUPAGE DISCHARGE

DAY	FREE CL <sub>2</sub> mg/l	TURBIDITY NTU	PO <sub>4</sub> mg/l	FREE CL <sub>2</sub> mg/l	TURBIDITY NTU	TEMP °F	pH	Fluoride	PO <sub>4</sub> mg/l	P.A.C. LBS/MG	ANALYST INT
1	0.80	0.10	0.52	0.86	0.08	54	7.6	1.0	0.54	0	CT
2	0.81	0.10	0.51	0.87	0.10	54	7.6	1.1	0.53	0	FG
3	0.83	0.09	0.53	0.87	0.10	54	7.6	1.1	0.53	0	RC
4	0.81	0.10	0.51	0.86	0.11	53	7.6	1.1	0.50	0	FG
5	0.83	0.10	0.52	0.91	0.10	53	7.7	1.1	0.54	0	RC
6	0.82	0.11	0.54	0.87	0.09	53	7.7	1.1	0.52	0	KD
7	0.83	0.11	0.52	0.86	0.09	53	7.7	1.0	0.52	0	KD
8	0.84	0.10	0.52	0.89	0.09	51	7.7	1.0	0.54	0	AM
9	0.82	0.11	0.51	0.87	0.10	53	7.7	1.0	0.52	0	AM
10	0.86	0.09	0.52	0.88	0.11	52	7.6	1.0	0.54	0	AM
11	0.84	0.10	0.53	0.86	0.09	52	7.6	1.1	0.53	0	KD
12	0.82	0.10	0.54	0.87	0.11	52	7.6	1.1	0.55	0	KD
13	0.83	0.12	0.53	0.88	0.11	52	7.6	1.0	0.51	0	AM
14	0.82	0.11	0.53	0.89	0.09	52	7.6	1.0	0.52	0	AM
15	0.82	0.10	0.52	0.87	0.11	52	7.6	1.0	0.51	0	MR
16	0.84	0.09	0.55	0.85	0.10	52	7.6	1.1	0.51	0	CT
17	0.81	0.10	0.51	0.86	0.10	52	7.6	1.1	0.53	0	AM
18	0.84	0.11	0.56	0.89	0.10	51	7.6	1.1	0.55	0	AM
19	0.81	0.10	0.52	0.84	0.10	51	7.7	1.1	0.55	0	AM
20	0.80	0.11	0.54	0.87	0.10	51	7.6	1.1	0.53	0	KD
21	0.86	0.10	0.50	0.85	0.09	49	7.6	1.1	0.51	0	KD
22	0.86	0.10	0.49	0.86	0.09	51	7.6	1.0	0.52	0	AM
23	0.81	0.11	0.53	0.91	0.10	50	7.7	1.0	0.52	0	AM
24	0.84	0.11	0.52	0.87	0.10	50	7.6	1.1	0.51	0	AM
25	0.85	0.11	0.53	0.88	0.10	50	7.6	1.0	0.52	0	KD
26	0.86	0.09	0.54	0.88	0.10	49	7.6	1.0	0.53	0	KD
27	0.84	0.11	0.55	0.84	0.10	49	7.7	1.1	0.49	0	AM
28	0.82	0.12	0.52	0.87	0.09	48	7.6	1.0	0.51	0	JG
29	0.82	0.11	0.54	0.89	0.09	48	7.7	1.0	0.52	0	JG
30	0.80	0.11	0.51	0.89	0.09	48	7.6	1.0	0.52	0	KD
31										0	
AVG	0.83	0.10	0.53	0.87	0.10	51	7.6	1.1	0.52	0	
MAX	0.86	0.12	0.56	0.91	0.11	54	7.7	1.1	0.55	0	
MIN	0.80	0.09	0.49	0.84	0.08	48	7.6	1.0	0.49	0	

  
Terrance McGhee  
Manager of Water Operations

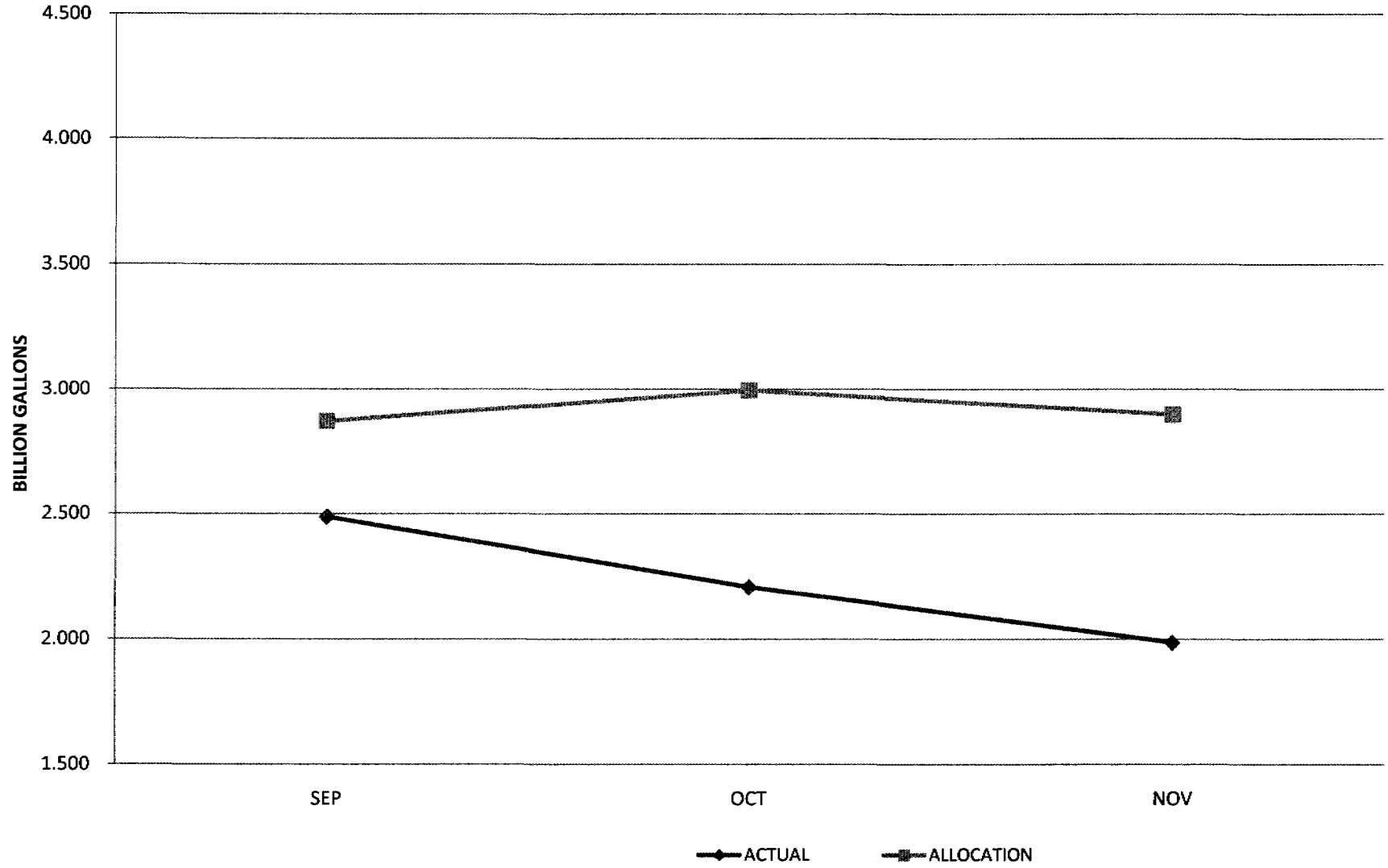
DU PAGE WATER COMMISSION  
WATER SALES ANALYSIS

01-May-92 TO 30-Nov-11

PER DAY AVERAGE 81,229,004

MONTH	SALES TO CUSTOMERS (GALLONS)	PURCHASES FROM CHICAGO (GALLONS)	GALLONS BILLED %	BILLINGS TO CUSTOMERS	BILLINGS FROM CHICAGO	DOCUMENTED COMMISSION WATER USE (2)	DOCUMENTED COMMISSION WATER USE %	TOTAL ACCOUNTED FOR %	DWC OPER. & MAINT. RATE (3)	CHGO RATE
May-09	2,446,586,000	2,522,765,415	96.98%	\$3,620,947.28	\$4,435,021.60	2,189,800	0.09%	97.07%	\$1.48	\$1.758
Jun-09	2,517,674,000	2,587,363,481	97.31%	\$3,726,157.52	\$4,548,585.00	2,202,450	0.09%	97.39%	\$1.48	\$1.758
Jul-09	2,888,499,000	2,971,742,918	97.20%	\$4,274,978.52	\$5,224,324.05	2,030,397	0.07%	97.27%	\$1.48	\$1.758
Aug-09	2,931,183,000	3,010,833,874	97.35%	\$4,338,150.84	\$5,293,045.95	7,554,834	0.25%	97.61%	\$1.48	\$1.758
Sep-09	2,614,552,000	2,691,957,594	97.12%	\$3,869,536.96	\$4,732,461.45	1,994,945	0.07%	97.20%	\$1.48	\$1.758
Oct-09	2,155,177,000	2,204,779,266	97.75%	\$3,189,681.96	\$3,876,001.95	2,141,324	0.10%	97.85%	\$1.48	\$1.758
Nov-09	2,003,572,000	2,054,392,036	97.53%	\$2,985,286.56	\$3,611,621.20	2,224,921	0.11%	97.63%	\$1.48	\$1.758
Dec-09	2,124,149,000	2,174,881,342	97.67%	\$3,143,740.52	\$3,823,441.40	2,335,534	0.11%	97.77%	\$1.48	\$1.758
Jan-10	2,152,708,000	2,207,536,160	97.52%	\$3,186,007.84	\$4,426,110.00	2,148,128	0.10%	97.61%	\$1.48	\$2.005
Feb-10	1,920,433,000	1,956,112,219	98.18%	\$2,842,240.84	\$3,922,005.00	1,920,979	0.10%	98.27%	\$1.48	\$2.005
Mar-10	2,088,030,000	2,142,426,434	97.46%	\$3,090,284.40	\$4,295,565.00	3,367,754	0.16%	97.62%	\$1.48	\$2.005
Apr-10	2,117,657,000	2,160,538,653	98.02%	\$3,134,132.36	\$4,331,880.00	2,162,448	0.10%	98.12%	\$1.48	\$2.005
May-10	2,493,442,000	2,546,177,057	97.93%	\$4,587,933.28	\$5,105,085.00	1,951,633	0.08%	98.01%	\$1.84	\$2.005
Jun-10	2,379,251,000	2,435,768,080	97.68%	\$4,377,821.84	\$4,883,715.00	1,052,920	0.04%	97.72%	\$1.84	\$2.005
Jul-10	2,977,883,000	3,048,231,920	97.69%	\$5,478,936.72	\$6,111,705.00	1,342,710	0.04%	97.73%	\$1.84	\$2.005
Aug-10	2,867,253,000	2,924,004,988	98.06%	\$5,275,745.52	\$5,862,630.00	930,281	0.03%	98.09%	\$1.84	\$2.005
Sep-10	2,525,751,000	2,588,259,352	97.58%	\$4,647,381.84	\$5,189,460.00	1,085,300	0.00%	97.58%	\$1.84	\$2.005
Oct-10	2,394,743,000	2,449,952,618	97.75%	\$4,406,327.12	\$4,912,155.00	1,143,788	0.05%	97.79%	\$1.84	\$2.005
Nov-10	2,044,476,000	2,079,920,200	98.30%	\$3,761,835.84	\$4,170,240.00	955,414	0.05%	98.34%	\$1.84	\$2.005
Dec-10	2,173,930,000	2,196,014,963	98.99%	\$4,000,031.20	\$4,403,010.00	943,234	0.04%	99.04%	\$1.84	\$2.005
Jan-11	2,176,905,000	2,203,802,993	98.78%	\$4,005,505.20	\$4,418,625.00	6,094,505	0.28%	99.06%	\$1.84	\$2.005
Feb-11	1,960,872,000	1,992,314,214	98.42%	\$3,608,004.48	\$3,994,590.00	3,351,469	0.17%	98.59%	\$1.84	\$2.005
Mar-11	2,084,629,000	2,119,930,175	98.33%	\$3,835,717.36	\$4,260,460.00	875,189	0.00%	98.33%	\$1.84	\$2.005
Apr-11	2,032,022,000	2,050,900,249	99.08%	\$3,738,920.48	\$4,112,055.00	674,574	0.03%	99.11%	\$1.84	\$2.005
May-11	2,342,971,000	2,384,648,379	98.25%	\$4,779,660.84	\$4,781,220.00	603,990	0.03%	98.28%	\$2.04	\$2.005
Jun-11	2,467,779,000	2,526,763,092	97.67%	\$5,034,118.96	\$5,066,160.00	700,540	0.03%	97.69%	\$2.04	\$2.005
Jul-11	3,211,413,000	3,276,142,145	98.02%	\$6,551,276.72	\$6,568,665.00	1,090,800	0.03%	98.06%	\$2.04	\$2.005
Aug-11	2,733,016,000	2,779,503,741	98.33%	\$5,575,352.64	\$5,572,905.00	792,559	0.03%	98.36%	\$2.04	\$2.005
Sep-11	2,486,823,000	2,533,174,564	98.17%	\$5,073,028.92	\$5,079,015.00	1,078,701	0.04%	98.21%	\$2.04	\$2.005
Oct-11	2,206,656,398	2,249,745,636	98.08%	\$4,501,579.05	\$4,510,740.00	681,023	0.03%	98.11%	\$2.04	\$2.005
Nov-11	1,986,038,000	2,012,618,454	98.68%	\$4,051,517.52	\$4,035,300.00	850,000	0.04%	98.72%	\$2.04	\$2.005
TOTALS (1)	581,031,067,798	597,541,055,902	97.24%	\$788,883,384.00	\$751,700,406.53	591,549,280	0.10%	97.34%	\$1.36	\$1.258

# DU PAGE WATER COMMISSION SALES FY 2011-12 VS. ALLOCATION



## DU PAGE WATER COMMISSION SALES FY 2011-12 & FY 2010-11 VS. HISTORICAL AVERAGE

