

# FISHWAY STATUS REPORT

Date: 3/3/2013  
 Inspection Period: 3/3 - 3/9/2013

# THE DALLES DAM



**US Army Corps  
of Engineers**  
Portland District

The Dalles Project-Fisheries  
 P.O. Box 564  
 The Dalles, OR 97058-9998  
 Phone: 541-506-3800

Fishways are inspected twice daily starting Mar 1. Entrances and ladder are checked a third time via SCADA computer.

The Dalles Dam	Inspections	Criteria	Total Number of Inspections:	21	Temperature:	41.1 F
	Out of Criteria	Limit	Comments		Secchi:	5.8 Ft.
<b>NORTH FISHWAY</b>						
Exit differential			Fishladder dewatered on Feb 4. ETR Mar 11; late due to Pit Tag antenna install delay.			
Count station differential						
Weir crest depth						
Entrance differential						
Entrance weir N1						
Entrance weir N2						
PUD Intake differential						
<b>EAST FISHWAY</b>						
Exit differential	0	≤ 0.5'				
Removable weirs 154-157	1	Per forebay	Weir 156 out of criteria with forebay at 158.4'.			
Weir 158-159 differential	0	1.0' ± 0.1'				
Count station differential	0	≤ 0.3'				
Weir crest depth	0	1.0' ± 0.1'				
Junction pool weir JP6	0	depth (≥ 7')	Average	10.4		
East entrance differential	0	1.0' - 2.0'	Average	1.6		
Entrance weir E1	0	No criteria	Average	10.2		
Entrance weir E2	0	depth (≥ 8')	Average	10.2		
Entrance weir E3	0	depth (≥ 8')	Average	10.2		
Collection channel velocity	0	1.5 - 4 fps	Average	2.3		
Transportation channel velocity	0	1.5 - 4 fps	Average	2.7		
North channel velocity		1.5 - 4 fps	Average	N/A	Dewatered. Returned to service 3/11/2013	
South channel velocity	0	1.5 - 4 fps	Average	3.5		
West entrance differential	0	1.0' - 2.0'	Average	1.5		
Entrance weir W1		Closed	Bulkhead installed due to seized wheel on weir.			
Entrance weir W2	0	depth (≥ 8')	Average	8.7		
Entrance weir W3	0	depth (≥ 8')	Average	8.7		
South entrance differential	0	1.0' - 2.0'	Average	1.4		
Entrance weir S1	0	depth (≥ 8')	Average	8.2		
Entrance weir S2	0	depth (≥ 8')	Average	8.2		
<b>JUVENILE PASSAGE</b>						
Sluiceway operation	0	units 1,8,18	Gates 1-2, 1-3, 17-1 and 17-2 open as per Fish Passage Plan. Main Unit 18 out of service.			
Turbine trashrack drawdown		<1.5', wkly				
Spill volume		40%, 24hr	On seal.			
Spill Pattern		per FPP	On seal.			
Turbine Unit Priority		per FPP	Starts April 1			
Turbine 1% Efficiency	0	per FPP				

**OTHER ISSUES:****THE DALLES****Birds/Sea Lions:**

Fisheries personnel conducts bird observations twice per day. See Avian tab for more observation results.

Second year of the Bald Eagle study completed Mar 15. Results pending.

One sea lion observed in tailrace in front of powerhouse Main Unit 4 Mar 3.

**Operations:**

North ladder is out of service through Mar 11 due to PIT antenna installation delay. FPOM notified. Project maintenance complete.

Ice/Trash Sluiceway opened Mar 1 for adult past.

Dewatered Navlock upper section fished Mar 9. No fish observed.

**Maintenance:**

North fishladder vegetation removal complete. North fishway PMs complete. ROV inspection of north entrance grating complete, all grating intact.

All turbine intakes inspected for debris by divers during the hydroacoustic equipment removal on all 22 trashracks.

**Current Outages:**

Main Unit 15, Main Unit 16, and Transformer 8 forced out of service due to transformer oil issues. Return to service Jun 6.

Main Unit 2 out of service Feb 11 - 28. Digital Governor install and Annual Maintenance.

Main Unit 18 out of service Mar 4 - 11. Five year over haul, as built, generator heater, heat exchanger, and cavitation.

Navlock out Mar 2 - 16 for annual maintenance.

**Studies:**

PIT antenna north count station installation by PSMFC done. Crowder grating installed Mar 8. PSMFC will continue to monitor through Mar 31

The first ever PIT tag detections at The Dalles Adult East Ladder (TD1 in the database) occurred over the weekend. Four adult steelhead were detected with 10 to 20 + reads per fish with the new thin wall PIT tag antenna at the counting window.

The north ladder (TD2 in the database) will be coming online shortly. Full details will be published in an upcoming PTAGIS newsletter.

Permanent PIT antenna study DDR underway. Project supporting as needed. PDT site visit Mar 25.

East Fish Ladder backup study DDR continues. Project supporting as needed.

PUD freedom turbine planning underway. Project supporting as needed.

**Research/Contractors:**

Pacific States Marine Fisheries Commission (PSMFC) smolt monitoring at Northern Wasco County People's Utility District (PUD) will start March 1, 2013 - February 28, 2014 in order to be in compliance with the Federal Energy Regulatory Commission (FERC). Coordination underway. Presently the PUD is dewatered.

The University of Oregon Northern Pikeminnow Management Program electrofishing will commence in the tailrace BRZ one night during the week of April 8-12, 2013 and forebay BRZ one night during the week of April 29-May 3, 2013. Coordination underway.

Derelict USGS gear from the powerhouse and spillway deck was removed the week of Mar 4 by USGS staff.

Project maintenance to remove 45' I-beams at Main Unit 1, 5, and 19 forebay pier noses Date to be determined.

The University of Idaho's adult radio telemetry new antennae placement throughout both fish ladders completed. U of I will evaluate the extended spillwall by monitoring the movements of adult salmon and steelhead outfitted with radio tags at Bonneville Dam in addition to monitoring the movements of adult Pacific lamprey outfitted with half-duplex PIT tags and acoustic tags (JSATS).

Project Fisheries removed USFWS camera mount equipment inside the north ladder week of Mar 4.

Normandau cameras in count stations video recording completed. Fish counters to start April 1. Site visit Mar 7.

Approved by;  
Ron D. Twiner  
Operation Project Manager  
The Dalles Dam

## The Dalles Dam Fish Counts

Date	East	North	East	North	Total	Total	East	North					East	North						
	Chinook	Chinook	Chinook	Chinook	East	North	Unclipped	Unclipped	East	North	East	North	Coho	Coho	East	North	East	North	Spill	
	Adult	Adult	Jack	Jack	Sthd	Sthd	Sthd	Sthd	Sock	Sock	Coho	Coho	Jack	Jack	Lamprey	Lamprey	Pink	Pink	KCFS	
3/3/13																				
3/4/13																				
3/5/13																				
3/6/13																				
3/7/13																				
3/8/13																				
3/9/13																				
% Split	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No data available

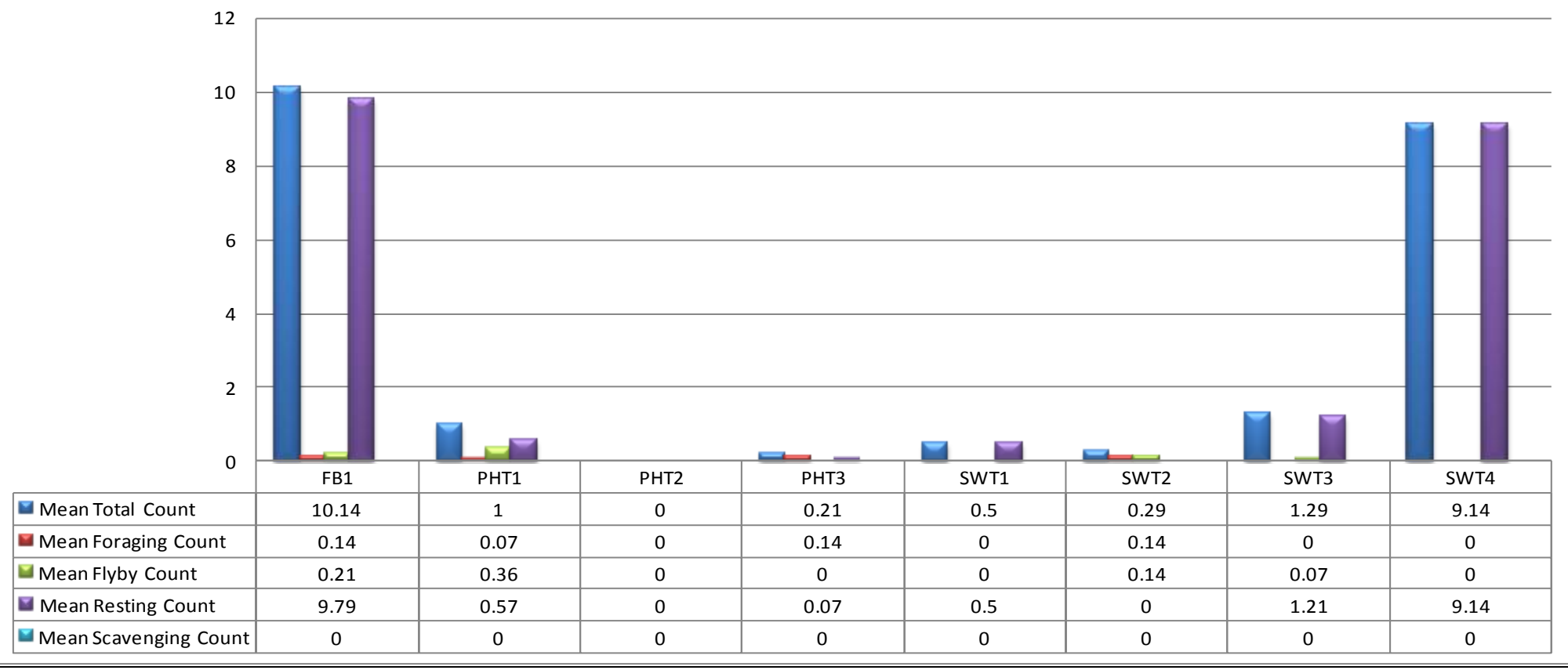
# East Adult Fish Ladder River/Water Temperatures

°F

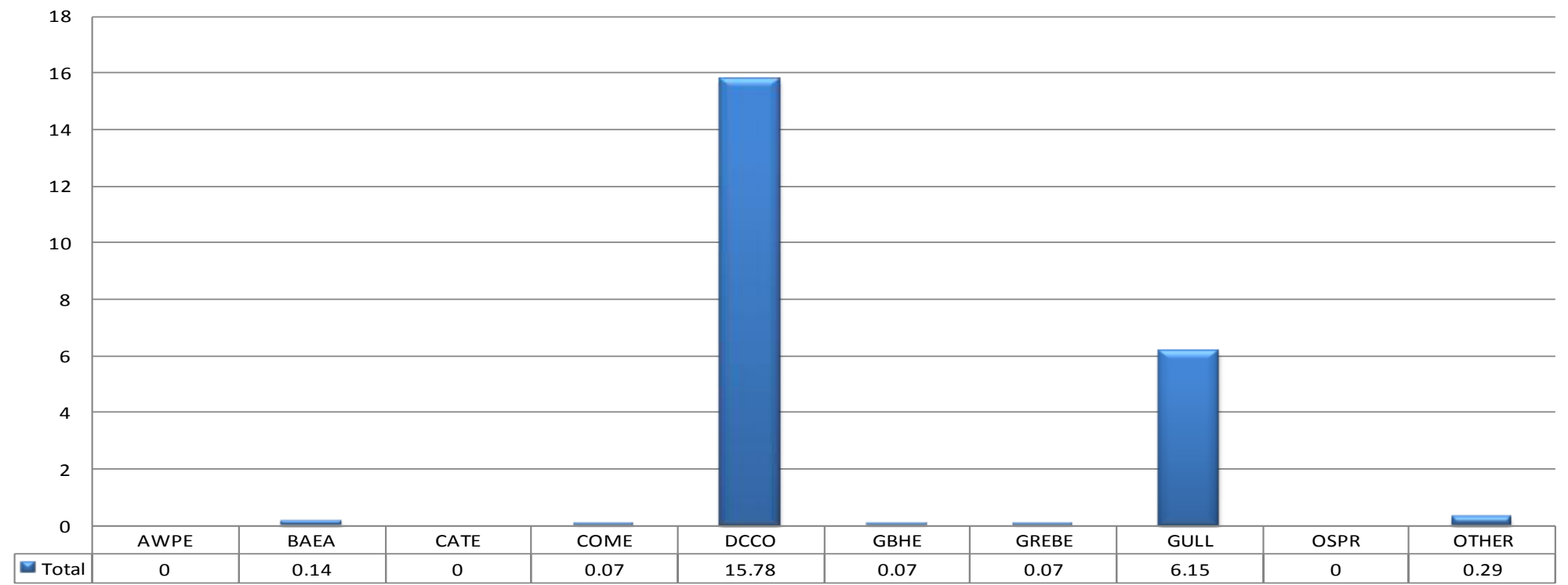
East Fish Ladder



### Mean Counts by Behavior



### Mean Counts by Species



GULL- any gull species, GREBE- Western or Clark's, DCCO- Double Crested Cormorant, AMWP- American White Pelican, CATE Caspian Tern  
 GBHE- Great Blue Heron, OSPR- Osprey, COME- Common Merganser, BAEA- Bald Eagle



# The Dalles Dam Bird Observations Zones

Washington Shore

FB1

PH-T1

PH-T2

SW-T1

PH-T3

SW-T2

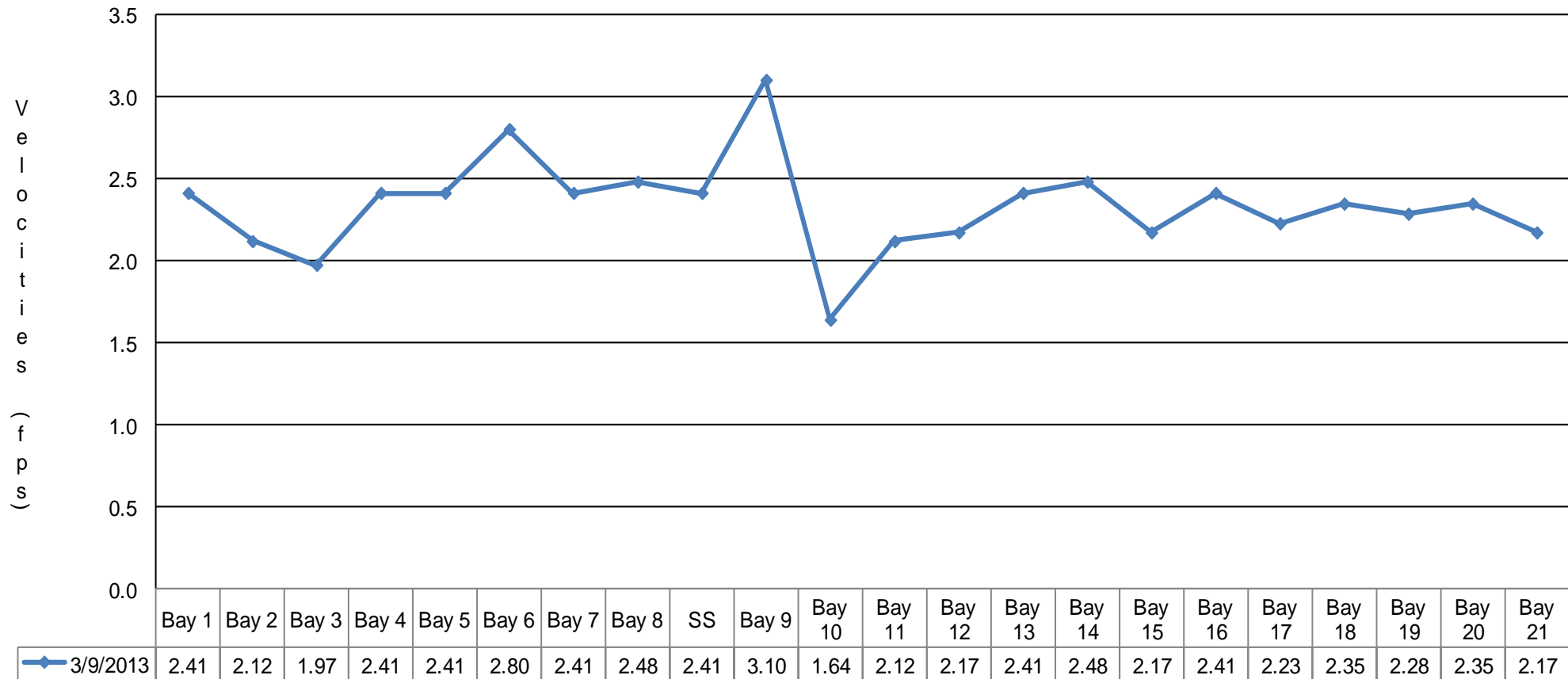
SW-T3

SW-T4

Oregon Shore



The Dalles Dam Collection Channel Velocities (fps)



=scada insp

Temp:		Secchi:	
41.2	SUN	5.5	
41.0	MON	5.5	
40.9	TUES	5.5	
41.0	WED	6.0	
41.1	THUR	6.0	
41.3	FRI	6.0	
41.5	SAT	6.0	
AVG: 41.1	AVG:	5.8	

The Dalles Dam Daily Readings and Averages for Temperatures, Secchi, Entrances, and Spill

North Fish Ladder		East Fish Ladder													
North Entrance		East Entrance					West Entrance			South Entrance			% Spill		
Date:	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential		S1 Depth	S2 Depth
3/3/13			1.7	10.1	10.2	10.2	10.8	1.7		10.2	10.2	1.5	8.0	8.0	O n s e a l
3/3/13			1.7	10.1	10.2	10.2	10.8	1.5		9.4	9.4	1.5	8.0	8.0	
3/3/13		N o r t h  L a d d e r	1.7	10.1	10.2	10.2		1.5	C l o s e d	9.4	9.4	1.4	8.2	8.2	
3/4/13			1.3	11.5	11.4	11.4	12.5	1.5		10.0	10.0	1.4	8.2	8.2	
3/4/13			1.5	11.4	11.5	11.5	13.0	1.6		9.9	9.9	1.5	8.2	8.2	
3/4/13			1.8	10.2	10.3	10.3		1.7		9.7	9.7	1.5	8.3	8.3	
3/5/13			1.5	10.0	10.6	10.6	11.2	1.4		9.5	9.6	1.4	8.1	8.2	
3/5/13			1.4	10.0	10.4	10.4	11.6	1.5		9.6	9.5	1.4	8.2	8.1	
3/5/13			1.0	11.6	11.5	11.5		1.1		10.0	10.1	1.3	8.2	8.1	
3/6/13			1.6	10.1	10.0	10.0	10.5	1.6		8.4	8.4	1.4	8.1	8.2	
3/6/13			1.6	10.5	10.6	10.5	11.3	1.6		9.0	9.0	1.4	8.2	8.1	
3/6/13			1.4	10.1	10.6	10.6		1.3		9.5	9.5	1.3	8.2	8.3	
3/7/13		1.6	10.4	10.5	10.4	10.9	1.4	9.5	9.5	1.5	8.1	8.1			
3/7/13		1.6	10.4	10.4	10.4	10.7	1.4	9.0	9.0	1.4	8.1	8.1			
3/7/13		1.7	10.6	10.5	10.6		1.5	9.1	9.0	1.5	8.1	8.2			
3/8/13		1.5	10.0	10.1	10.1	9.9	1.5	8.4	8.5	1.4	8.1	8.1			
3/8/13		1.5	9.9	10.0	10.0	9.4	1.4	8.5	8.6	1.3	8.2	8.2			
3/8/13		1.6	10.0	10.1	10.0		1.5	8.6	8.5	1.3	8.3	8.3			
3/9/13		1.6	10.1	10.0	10.0	10.3	1.7	8.5	8.6	1.4	8.3	8.2			
3/9/13		1.5	10.0	10.0	10.1	11.0	1.7	8.4	8.5	1.3	8.3	8.2			
3/9/13		1.5	10.1	10.0	10.0		1.7	8.4	8.5	1.3	8.3	8.2			
AVG:			1.6	10.2	10.2	10.2	10.4	1.5		8.7	8.7	1.4	8.2	8.2	