Milford Lake

2014 BG Algae Impacts

Milford Lake
407,500 ac/ft

Tuttle Creek
299,100 ac/ft

Perry Lake
218,800ac/ft

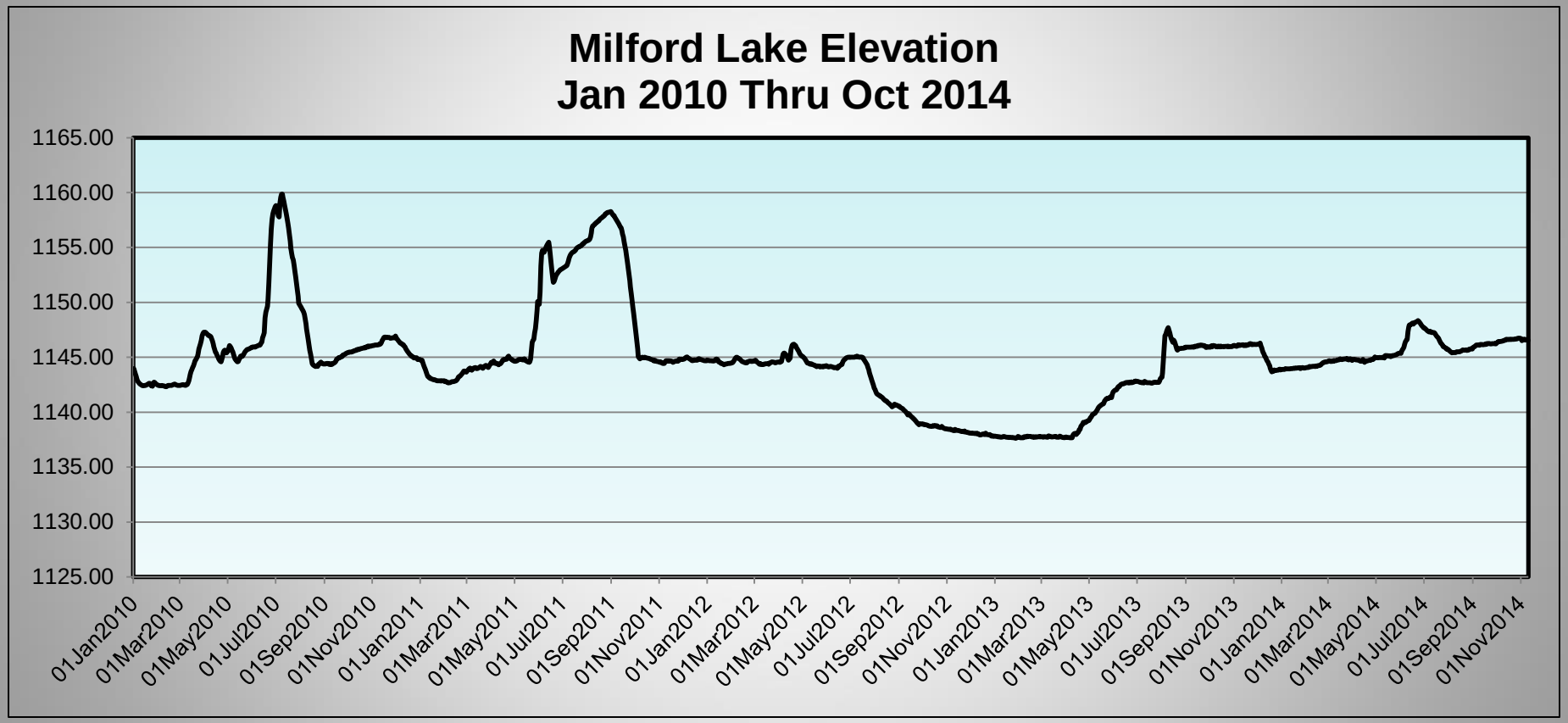
Clinton Lake
110,500ac/ft

Marion Lake
80,000 ac/ft

Pomona Lake
49,170ac/ft

2014 Milford Lake BG Algae Test Results

Location	Date of Test	6/5/2014	6/12/2014	6/27/2014	7/3/2014	7/10/2014	7/17/2014	7/24/2014	7/31/2014	8/7/2014	8/14/2014	8/21/2014	8/28/2014	9/4/2014	9/11/2014	9/18/2014	9/25/2014	10/2/2014	10/9/2014	10/16/2014
State Park Beach	BG Cell Count	1,260	49,754	0	144,336	17,643	35,267	32,686	88,170	8,186	11,029	22,041	107,065	722,201	99,180	5,353	6,718,005	19,520	946	20,474
LM0190AA	Microcystin Level	<0.5	<0.5	<0.5	<0.5	<0.5	6	8	2	<0.5	0.6	<0.5	<0.5	10	<0.5	<0.5	70	<0.5	<0.5	<0.5
Milford City Beach	BG Cell Count	182,070	33,696	177,877	221,730	12,914	779,940	105,350	163,170	21,742	401,450	41,639	362,414	331,532	687,967	777,510	5,014,422	297,340	34,643	21,297
LM0190AB	Microcystin Level	<0.5	<0.5	9	5	3	80	10	2	1	10	2.5	2	5	4	8	25	2	5	<0.5
Timber Creek Ramp	BG Cell Count	3,016,125	126,922	518,092	417,318	10,718	2,746,800	164,629	7,559	71,798	48,181	285,390	1,846,295	11,919,600	2,912,221	318,855	29,383,200	456,181	43,481	5,353
LM0190AC	Microcystin Level	6	1	30	7	2	190	15	2	0.6	<0.5	3	10	130	12	4	120	3	<0.5	<0.5
Wakefield Beach/Ramp	BG Cell Count	28,350		11,659	37,806	195,366	204,197	62,347	0	47,263	495,917	1,200,320	53,555	19,884,630	177,891	124,459	91,296,450	204,651	86,949	28,974
LM0190AD	Microcystin Level	<0.5		<0.5	1	17	8	10	1	<0.5	1.7	5	1	250	2	4	1500	1	4	1
Curtis Creek Arm	BG Cell Count	37,799			18,259	160,589	276,180													
LM0190AE	Microcystin Level	<0.5			<0.5	5	4													
Military Marina Cove	BG Cell Count	590,940	51,012																	
LM0190AF	Microcystin Level	4	<0.5																	
Milford Marina Docks	BG Cell Count	107,710																		
LM0190AG	Microcystin Level	<0.5																		
East Rolling Hills Ramp	BG Cell Count							22,361	102,711	4,093	50,721	556,150	59,880	2,266,424	919,658	43,156	3,614,283	75,948	8,501	12,283
LM0190AH	Microcystin Level							6	2	<0.5	0.6	4	<0.5	20	5	1	15	<0.5	<0.5	<0.5
Lake Advisory Status		Lake-Wide Warning	Lake-Wide Advisory	Warning North of Farnum Creek	Warning North of Farnum Creek/Advisory South	Lake-Wide Warning	Lake-Wide Warning	Warning North of Farnum Creek/Advisory South	Lake-Wide Advisory	Advisory North of Farnum Creek	Warning North of Farnum Creek/Advisory South	Lake-Wide Warning	Warning North of Farnum Creek/Advisory South	Lake-Wide Warning	Lake-Wide Warning	Warning North of Farnum Creek/Advisory South	Lake-Wide Warning	Warning North of Farnum Creek/Advisory South	Advisory North of Farnum Creek/Clear South	BGA Bloom Over


Milford Lake Elevation
Jan 2010 Thru Oct 2014
1165.00
1160.00
1155.00
1150.00
1145.00
1140.00
1135.00
1130.00
1125.00
01Jan2010
01Mar2010
01May2010
01Jul2010
01Sep2010
01Nov2010
01Jan2011
01Mar2011
01May2011
01Jul2011
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01Jan2014
01Mar2014
01May2014
01Jul2014
01Sep2014
01Nov2014

2014 HAB Facts/Figures:

- 19 consecutive weeks testing
- 14 weeks under “Warning” level status for entire/partial area of lake.
- 4 weeks under “Advisory” level status for entire/partial area of lake.
- Designated beaches operated by Corps/KDWP&T were CLOSED 17 out of 19 weeks this recreation season.

133 consecutive days of elevated status beginning June 5th

WARNING
Harmful Algae Present
People, animals may get sick
No Water Contact, Swimming, Wading
No Skiing or Jet Skies
Don't let people/pets eat dried algae or drink untreated lake water
Clean fish well and discard guts
If people/pets contact lake water: wash with clean, potable water as soon as possible
Avoid areas of visible algae accumulation
785-296-5606
All areas north of Farnum Creek remain under a Warning level status for Blue Green Algae and the areas south of Farnum Creek have been placed under an Advisory level status for the 4th of July Holiday weekend.

US Army Corps of Engineers
All Lake access temporarily closed due to dangerous Blue-Green Algae toxin levels.
DANGER
SITE IS CLOSED
due to harmful algae
KEEP OUT

Milford Lake supports a multi-million dollar regional recreation based economy with opportunities including:

Federal, State, County

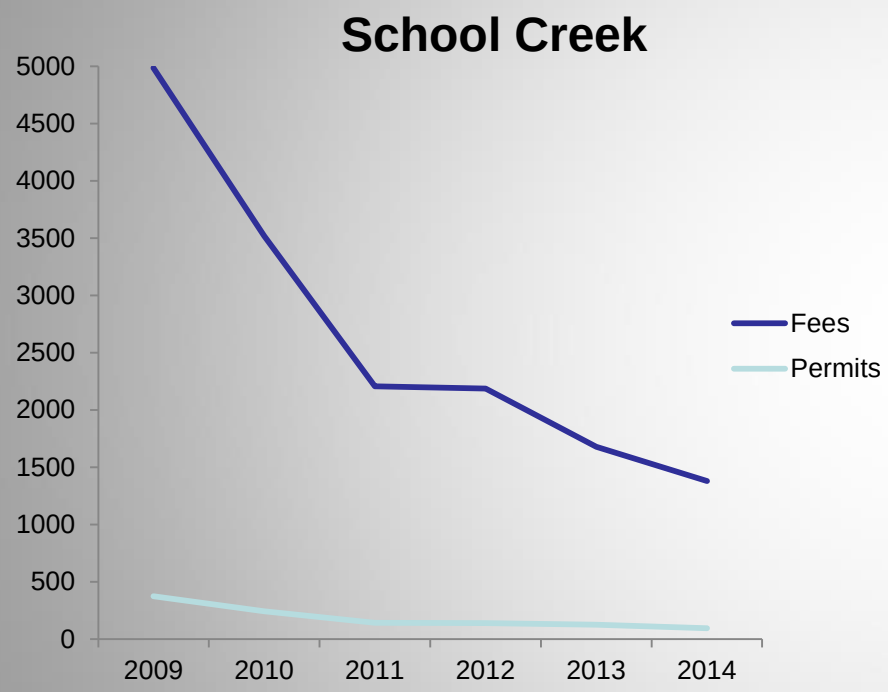
Corps of Engineers
Ft. Riley Marina/MWR
Milford State Park
Milford Wildlife Area
    Milford Wetland Project
Milford Nature Center
Clay County Park

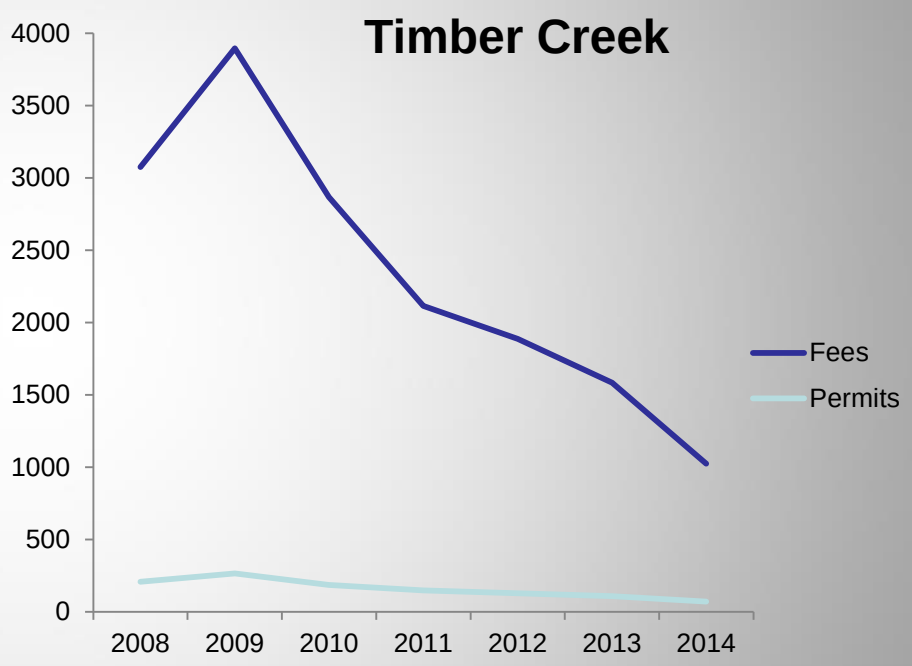
•Over 1,000 campsites

Private

Acorns Resort
Milford Lake Marina
Thunderbird Marina
Flagstop Resort/Campground
Beacon Marine-Boat Sales/Repair
JJ's Marine-Boat Sales/Repair
Randy's Marine Service
Black Pearl Marine Service
Performance Outboards Service
Tittel's Outdoor General Store
Grandpa Boone's Cabin/Guide Service

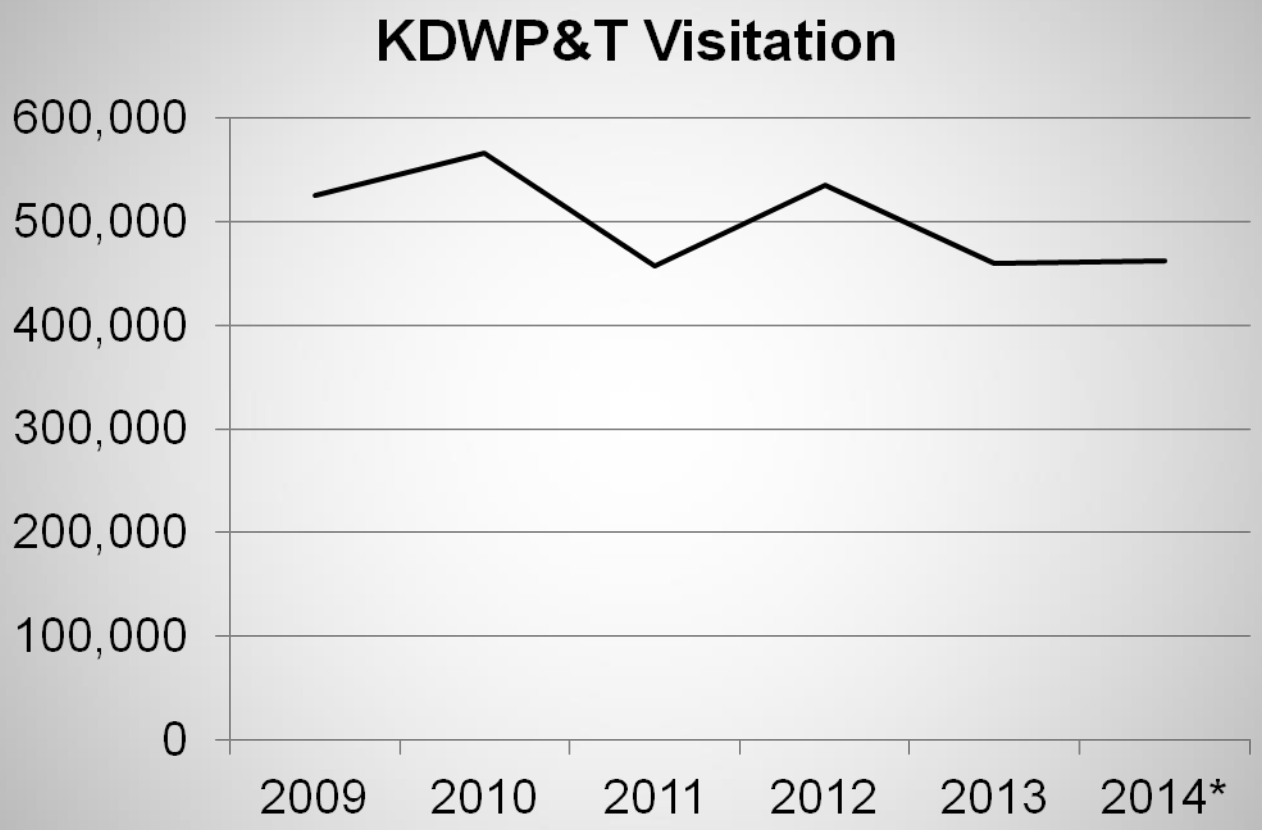
USACE Recreation Fees Collected


School Creek
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2009
2010
2011
2012
2013
2014
Fees
Permits


Timber Creek
4000
3500
3000
2500
2000
1500
1000
500
0
2008
2009
2010
2011
2012
2013
2014
Fees
Permits

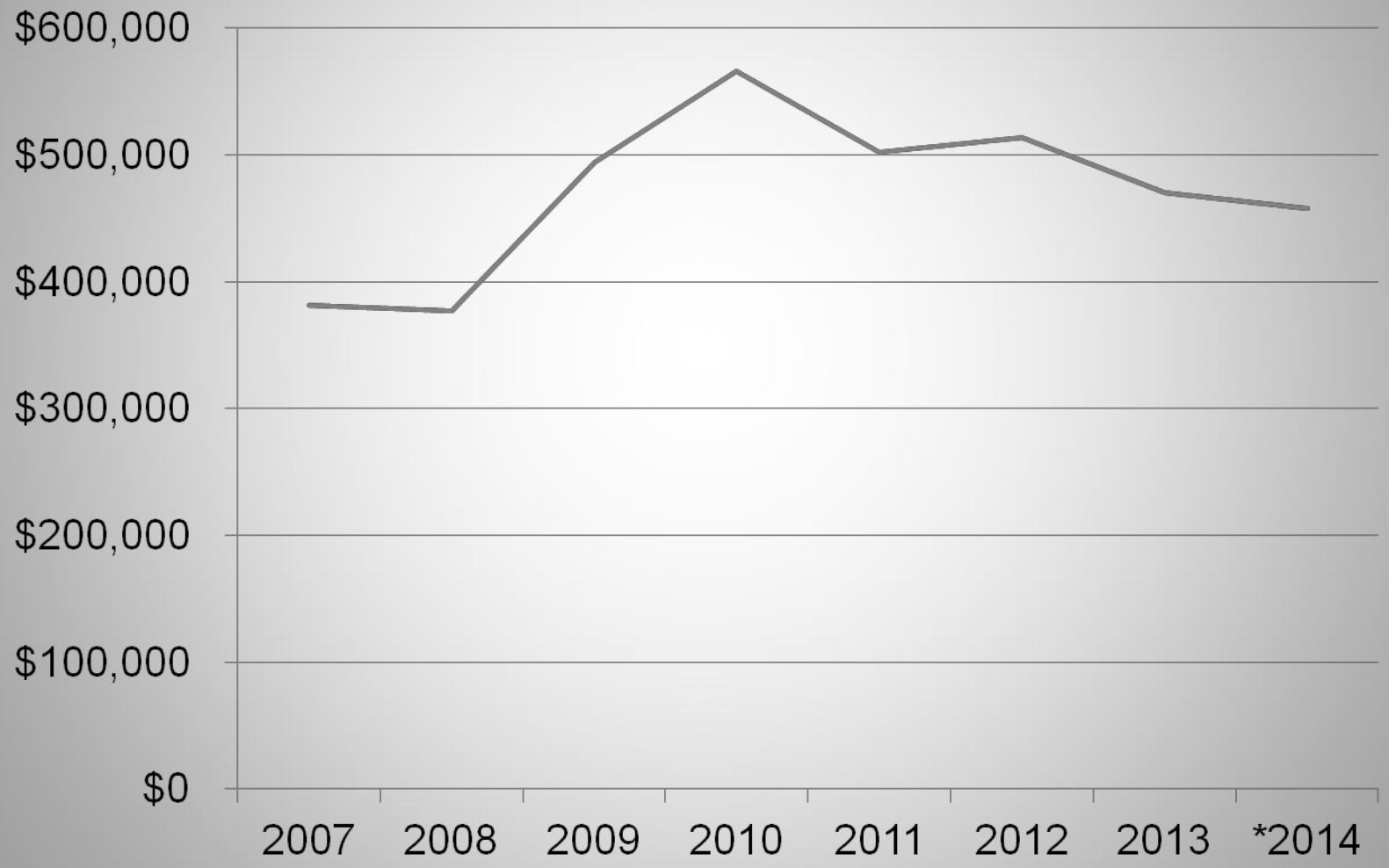
Camping Permits Sold During Recreation Season

	School Creek Park	Timber Creek Park
FY-07	343	228
FY-10	243	185
FY-14	96	70



* through October

KDWP&T Total Park Revenue



• through October

Challenges

- Delays in testing/reporting/notification process
- “Prohibited” signage-how to enforce?
- 17 boat ramp locations-some in privately operated areas
- Control over designated beaches-no control over non-designated and natural beach areas
- Leaseholder support & understanding

BLUE CATFISH * 10
CHANNEL CATFISH * 5
FLATHEAD CATFISH 50
CRAPPIE 5
LARGEMOUTH BASS * * 15" 5
SMALLMOUTH BASS * * 15" 5
SPOTTED BASS * * 15" 5
WALLEYE * * * * 18" 2
WIPER * * *
ARNING
Harmful Algae Present
People, Animals may get sick
No Pets or Livestock
areas north of Farnum
Creek remain under a
level status for Blue
Green Algae and the areas
of Farnum Creek have
been placed under an
level status for the
July Holiday weekend.

Ideas to adequately communicate risk but minimize impacts?

Can threshold (advisory/warning) levels be adjusted?

Can signage be altered to “risk based” message?
low-medium-high

Can we improve testing/results/notifications process to provide timely message?

Questions?