Attachment 1
Woodridge Lake Sewer District
Previous CCTV and Repairs (2003-2008)

Review of NEPCCO Reports

LEGEND

Short Liner(s)
CITS
Service Connection CITS sealing

File name	Street	MH #s	Comments	Year			W&C Subarea
welssford esmt.pdf	Wellsford Easement	8-9, 8-7, 7-6, 4-6, 1-2, 3-2, 3-4, 5-4, 5-57	CITS	2004		Repairs in July 2004	5
welsford.pdf	Wellsford Drive	23-22, 22-21, 20-21, 20-19, 19-18, 18-17W, 10-9, 10-11, 11-12, 12-13, 13-14, 14-15, 15-16, 16-17W, 8-7, 7-6, 5-4, 4-3, 3-2, 2-1, 2-1E, 1E-2E, 2E-3E, 3E-4E, 45-4E	CCTV & MH repairs	2005		13 SC, 38951 LF pipe, 4 manholes to be repaired	CCTV 5; MHs Var
welsfor Esmt.pdf	Wellsford Easement	8-7, 7-6, 8-9, 5-57, 5-4, 1-2, 2-3, 3-4, 4-6	CCTV	2004		No doc on repairs	5
weldon cornwall.pdf	Weldon Court	1-1, 2-1	SVC CITS	2003			1
	Cornwall Dr/Weldon Ct. & Equestrian Dr	6-7, 5-6, 1-2, 7-PS; 9-8, 8-10	Short Liner	2003			1
	Paxton Ct.	6-5	Short Liner	2003			8
w hyerdale.pdf	West Hyderdale Ave.	24-25, 25-26, 26-,27, 27-28, 28-29, 29-30, 23-24	CCTV	1998		Minor issues	5
Sherbrook Drive and Marshepaug Rd.pdf	Sherbrook Drive/Squire Court/Marshepaug Rd/East Hyerdale Rd./	6-7, 7-8, 1-8, 9-10, 10-11, 11-12, 12-13, 15-17w, 7-6, 16-17, 17w-16, 17-18, 6-5, 5-4, 4-3, 1-77, 2-1, 3-2, 78-79, 18-63	CCTV	2005		see below	6
	Sherbrook Drive/Squire Court	6-7, 7-8, 9-10, 10-11, 12-13, 15-17w, 16-17, 17-18, 18-63; 1-8	CITS	2005			6
	Marshepaug Rd	4-3, 6-5, 1-77, 2-1, 3-2	CITS	2005			7
	East Hyderdale Dr./Sherbrook Dr.	77-78; 8-9, 16-17w	Short Liner	2005			6
	Marshepaug Rd.	7-6, 5-6, 2-6	Short Liner	2005			7
Sewer System, Evaluation Survey Flow Monitoring		DID NOT REVIEW AT THIS TIME		2002			
Misc. B.pdf	Wynwood Court, Wynwood ROW, Bexely ROW, Chatham	2-3, 2-1; 2-4, 4-3; 2-3, 2-1, 1-1; 1-2, 2-3, 3-4, 4-PS	CCTV	2002			8
	Paxton	3-4, 4-5, 5-6, 6-PS	CCTV	2002			7
	Weldon Court, Equestrian Drive, Cornwall	9-8, 8-7, 7-6, 6-5, 5-4, 4-3, 3-2, 2-1, 1-1; 8-10; 7-8, 8-PS, 2-3, 3-4, 4-5, 5-6, 6-7, 7-pump;	CCTV	2002			1
	Brynmoor Court	4-3 ,3-2, 1-2, 1-1	CCTV	2002			6
	Brynmoor Court	4-3;	Short Liner	2002			6

Review of NEPCCO Reports

LEGEND

Short Liner(s)
CITS
Service Connection CITS sealing

File name	Street	MH #s	Comments	Year			W&C Subarea
Misc. A.pdf	Wynwood Court, Bexley Court	1-2 ; 1-2	Short Liner	2004			8
	Weldon Court, Cornwall Dr.	7-6, 5-6 ; 7-8, 8-PS, 3-2, 4-3	Short Liner	2004			1
	Paxton Court	4-3, 1-2	Short Liner	2004			8
Milton.pdf	Milton Rd & Row	8-9, 8-7, 7-6, 6-5, 4-5, 4-3, 3-2, 1-2, 1-00	CCTV	2003		No record of repairs	5
Marshepaug and Sherbrook.pdf	Sherbrook, Ashley Dr,	7-6, 7-8, 8-9, 8-1, 10-9, 10-11, 11-12, 12-13, 13-14, 14-15, 16-17, 17-18, 18-63, 17w-16, 15-17w; 11-10,	CCTV	2005		77-78 broken pipe	5
	Marshepaug Rd., East Hyerdale	7-6, 6-5, 5-4, 4-3, 3-2, 2-1, 1-77; 77-78, 78-79, 79-1, 79-80, 80-79, 80-PS	CCTV	2005			6
	Ashley Drive	7-8, 7-6, 10-9, 9-8, 5-4, 2-1, 1-1, 11-10	SVC CITS	2005			5
Hyerdale Row.pdf	Hyerdale ROW	91-5, 5-4, 4-3, 3-2, 81-1, 1-2,	CCTV	2001			7
	Hyerdale ROW	91-5, 5-4, 4-3, 3-2, 81-1, 1-2,	CITS	2001			7
E Hyerdale and Beach B.pdf	East Hyerdale Dr., Beach Street,	42-43, 43-44, 44-45, 45-46, 46-47, 47-48, 48-49, 49-50, 50-51, 51-52, 52-53, 53-54, 54-55, 55-56, 56-57, 57-58, 58-PS, 61-stub, 61-60, 60-59, 59-PS, 62-PS	CCTV	2006			5
		62-63, 63-64, 64-65, 65-66, 75-74, 74-73, 73-72, 72-71, 71-70, 70-69, 69-68, 68-67,76-77, 76-stub, 77-76; 0-1, 1-2, 2-3, 3-4, 4-5, 5A-6, 6-7, 7-8, 8-9, 10-9, 10-11, 11-12, 12-13, 67-66,	CCTV	2006			6
CCTV Inspection NEPCC.pdf	East Hyerdale Dr,	1-2, 2-3, 3-4, 5-6, 8-7, 7-7, 8-9,	CCTV	2010		not sure where this is	
Brynmoor.pdf	Brynmoor Rd	1-2, 2-3, 2-1, 3-4, 4-5, 5-6,	CCTV	2002		pipe very poor condition	6
Billing and Recommended Work 01-06.pdf		DID NOT REVIEW AT THIS TIME					
Ashley.pdf	Ashley Drive, Shelbourne,	11-10, 10-9, 9-8, 8-7, 7-6, 6-5, 5-4, 4-3, 3-2, 2-1, 1-1	CCTV	2005			5

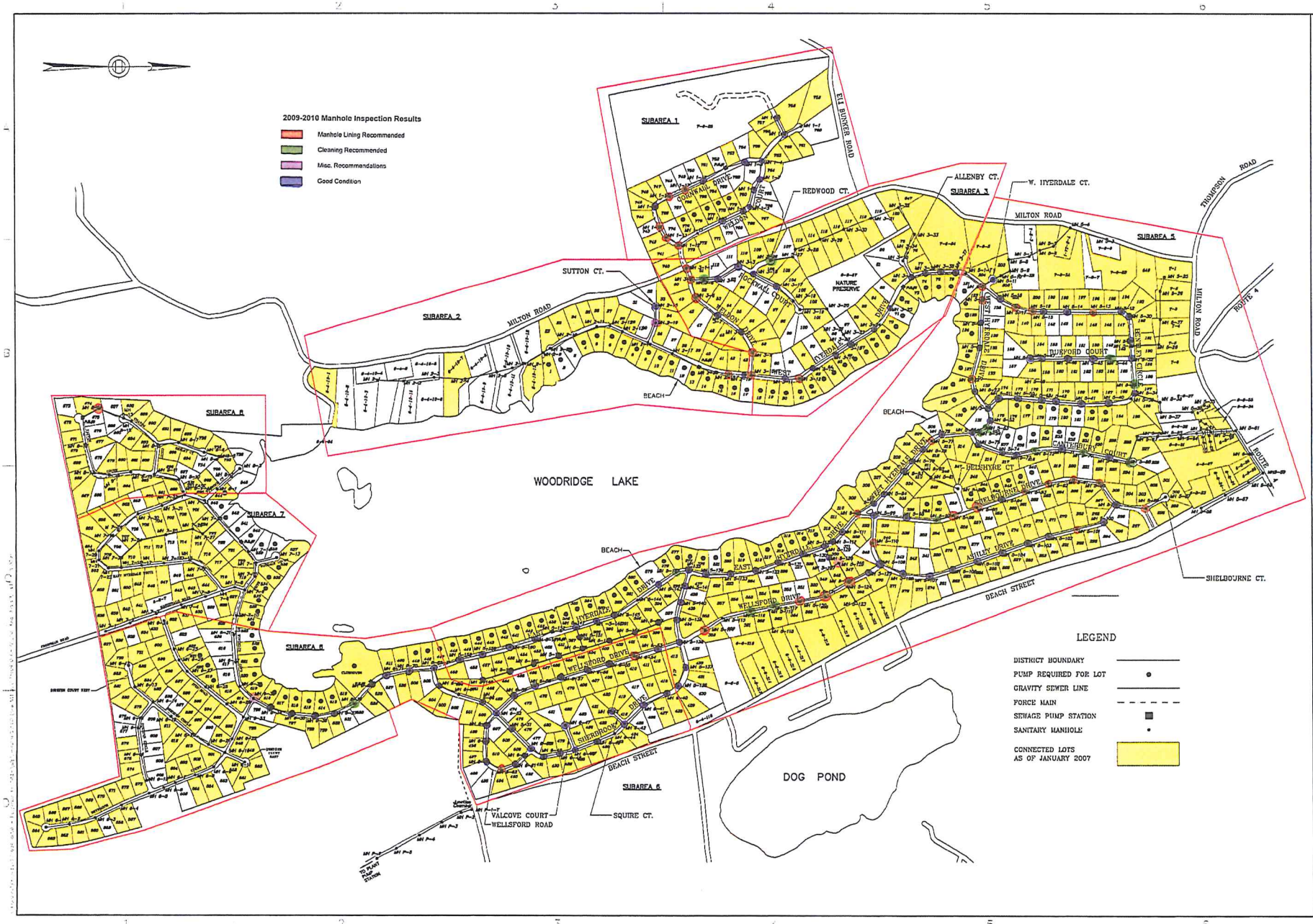
Attachment 2
Woodridge Lake Sewer District
Previous Manhole Inspections

2009-2010 MH Inspections Results

Subarea	Street	Manhole		Observations
1	Weldon	1-5		Possible infiltration (minor) on walls. Clean with little flow.
1	Cornwall	1-12		Some stones/debri on bench.
1	Cornwall	1-13		Riser is 4 bricks high. Stains on the walls and rags on the bench. Infiltration from top of corbel.
1	Cornwall	1-14		Riser is 4 bricks high. Lower half of wall is damp.
1	Cornwall	1-16		Riser is 2 bricks high. Walls are damp.
1	Cornwall	1-17		Riser is 2 bricks high. Located outside of house #36.
2	Sutton	2-16		Clean and dry. Need to raise.
2	West Hyerdale	2-19		Walls damp.
3	Rockwall	3-5		Dirty and very deep.
3	Redwood	3-26		Invert contains rags. Green PVC pipe half clogged with rags.
3	Weldon	3-2		Leaking in cover. Cover is in ditch line.
3	Weldon	3-6		Corbel and walls have slight decay.
3	Weldon	3-9		Possible infiltration.
3	West Hyerdale	3-12		Possible infiltration at wall and corbel.
3	West Hyerdale	3-10-T		Need to patch 4 inch hole in corbel.
3	Weldon	3-1-T		6 inch cast iron gumed up and walls decaying.
5	Bentley Circle	5-33		Bench and invert dirty. Invert covered with rags.
5	Bueford	5-44		Bench and Invert dirty.
5	West Hyerdale	5-53		Bench slightly dirty.
5	West Hyerdale	5-54		Bench slightly dirty.
5	Canterbury	5-68		Bench and invert dirty.
5	Canterbury	5-70		Bench dirty. Wall dirty "glob of ?".
5	Canterbury	5-72		Invert dirty/plugged up.
5	Wellsford	5-116		Bench slightly dirty. Near houses 64 and 69.
5	Wellsford	5-117		Bench slightly dirty (asphalt) and wet.
5	East Hyerdale	5-142		Top step broken. Rusty build up coming from 3 inch PVC at 11:00. Slight dampness on corbel.
5	Canterbury	5-69		Wall has clumps of (?) leaking in (rusty color).
5	West Hyerdale	5-77		Possible infiltration at top of corbel (white).
5	East Hyerdale	5-86		Clean/Average flow.
5	Shelbourne	5-88		Leaking at pipe connection. Corbel, riser and wall seams all damp.
5	Shelbourne	5-92		4 inch PVC pipe leaking were pipe comes out of wall (dripping). Corbel slightly dirty (dry mud).
5	Shelbourne	5-93		2 inch pipe leaking where pipe comes out of wall. Some asphalt on bench.
5	Shelbourne	5-95		Manhole damp.
5	Shelbourne	5-96		Walls need work and are leaking.
5	West Hyerdale	5-2		Drop off needs to be fixed.
5	West Hyerdale	5-13		Needs to be vacuumed out. Possible infiltration (white).
5	West Hyerdale	5-16		Infiltration. Steady water coming through walls.
5	West Hyerdale	5-17		Possible Infiltration.
5	West Hyerdale	5-19		Possible infiltration from wall seam.
5	West Hyerdale	5-22		Possible infiltration at 3 inc PVC.
5	Ashley	5-101		Slightly damp betwee corbel and riser.

2009-2010 MH Inspections Results

Subarea	Street	Manhole		Observations
5	Ashley	5-110		Slight Infiltration between wall and corbel.
5	Wellsford	5-114		Slight infiltration on corbel
5	Wellsford	5-120		2 inch PVC lines leaking at connection. Good condition.
5	Wellsford	5-122		Bench wet. Slight leak at wall and corbel seam. Little damp between riser and frame.
5	East Hyerdale/Wellsford RO	5-126		Good conditon-Needs to be raised.
5	Shelbourne	5-90		Good condition. Damp at riser.
5	Shelbourne	5-91		Corbel slightly dirty (dry mud). Bench slightly dirty. Damp at corbel riser seam.
5	Shelbourne	5-97		Low flow. Bench dirty.
5	Wellsford	5-121		Damp at riser/frame seam. Good condition.
6	East Hyerdale	6-38		Invert dirty.
6	Wellsford	6-54		Slight infiltration at seems of walls.
6	Wellsford	6-62		Rusty color infiltration from walls.
6	East Hyerdale	6-30		Riser needs work.
8	Paxton	8-14		Deteriation outside concrete (little). Very slight infiltration at bottom of frame.



WOODARD & CURRAN

COMMITMENT & INTEGRITY DRIVE RESULTS

www.woodardcurran.com

NO.	DESCRIPTION	DATE

WOODRIDGE LAKE SEWER DISTRICT COLLECTION SYSTEM

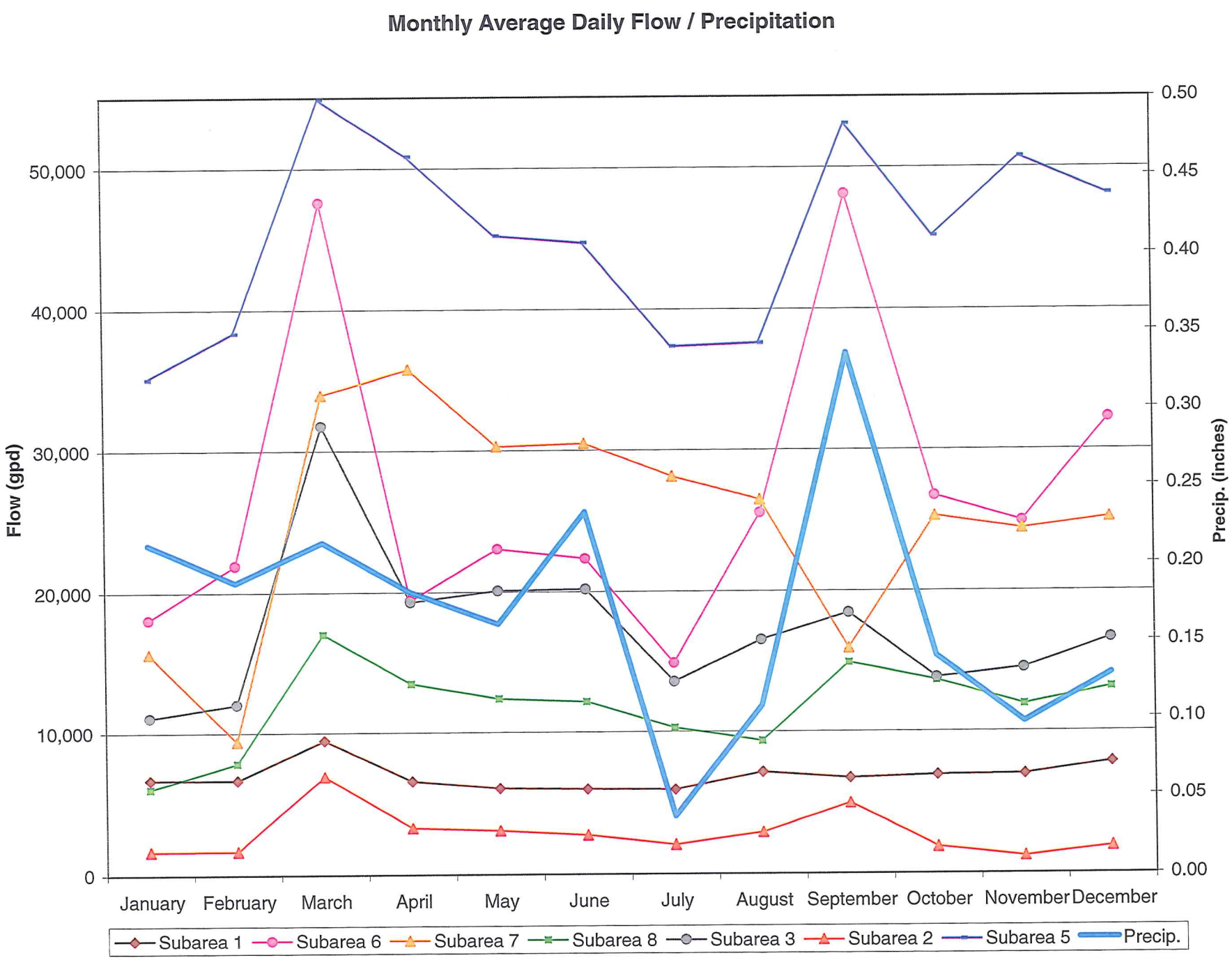
WOODRIDGE LAKE SEWER DISTRICT
GOSHEN, CT.

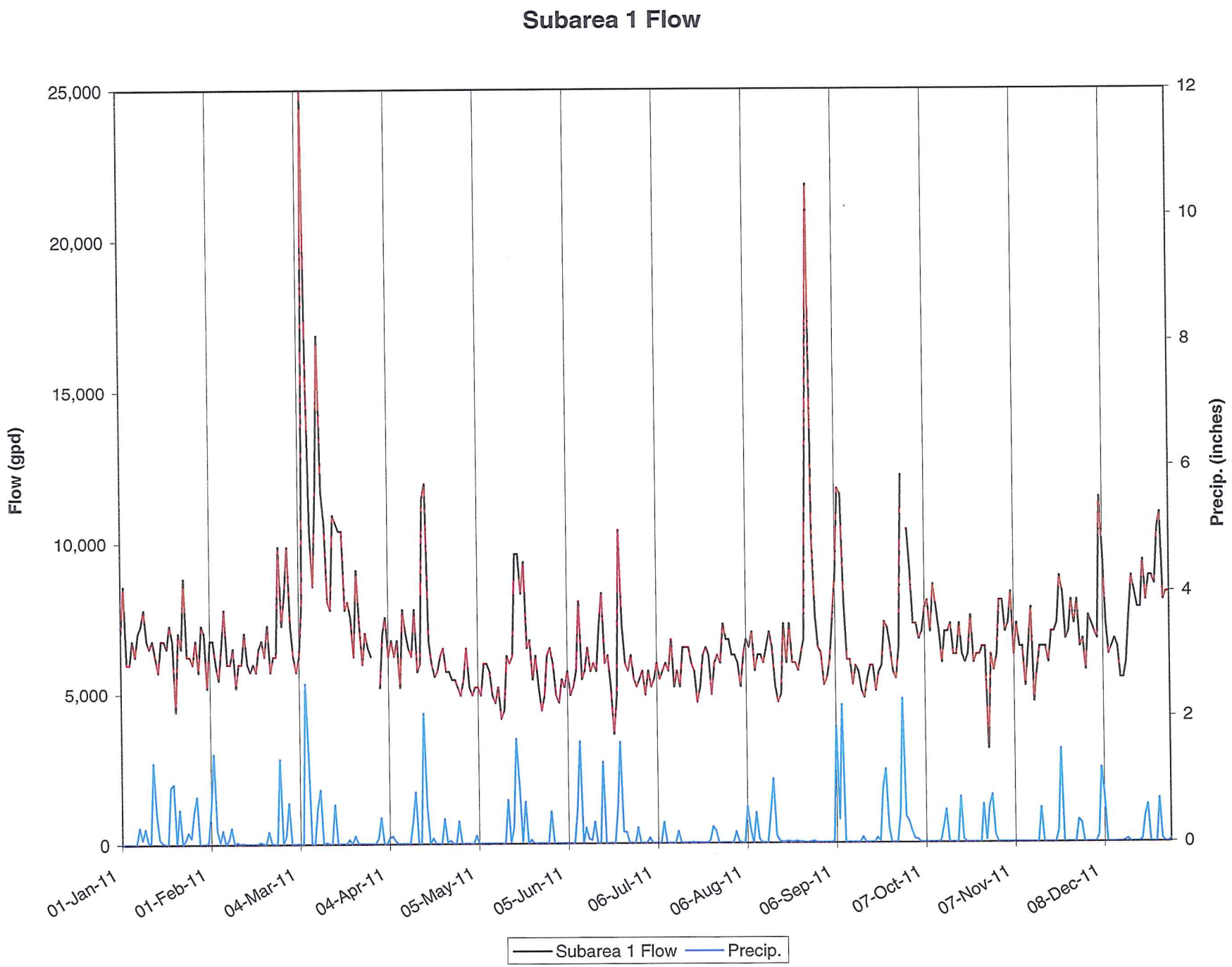
FLOW ISOLATION LOCATIONS
CCTV INSPECTION AREAS

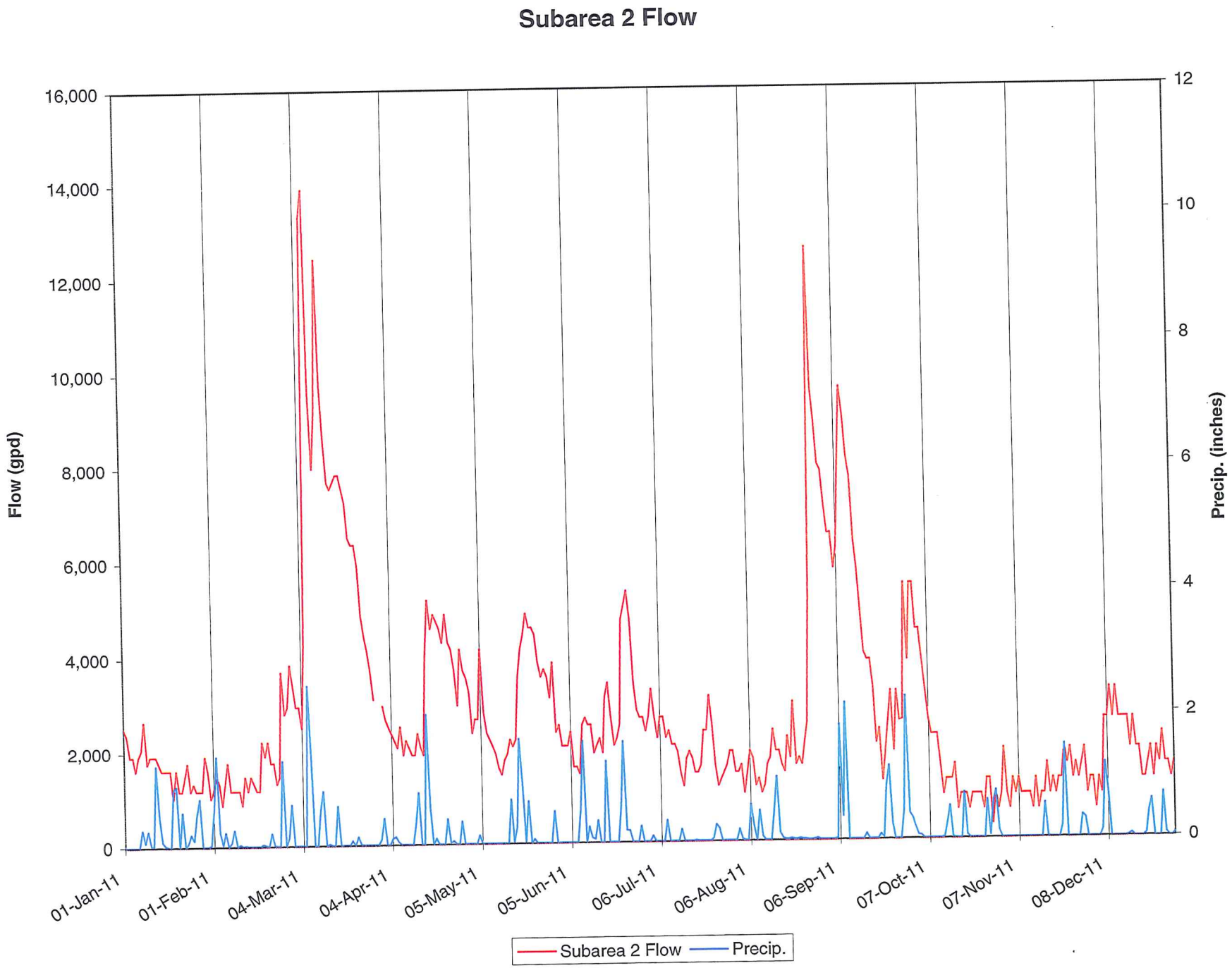
JOB NO.: 223604.00
DATE: APRIL, 2011
SCALE: AS NOTED
SHEET: OF

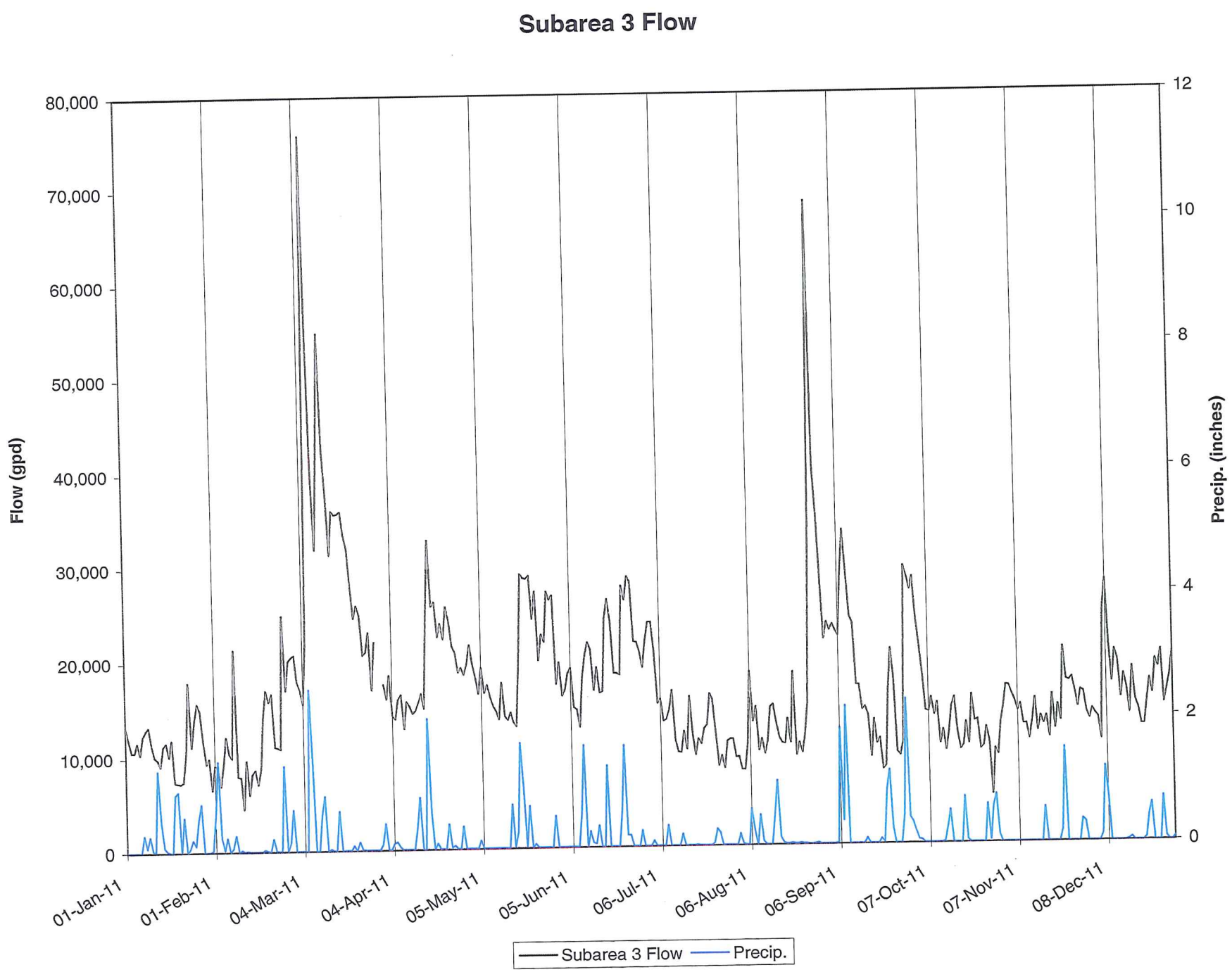
C-103

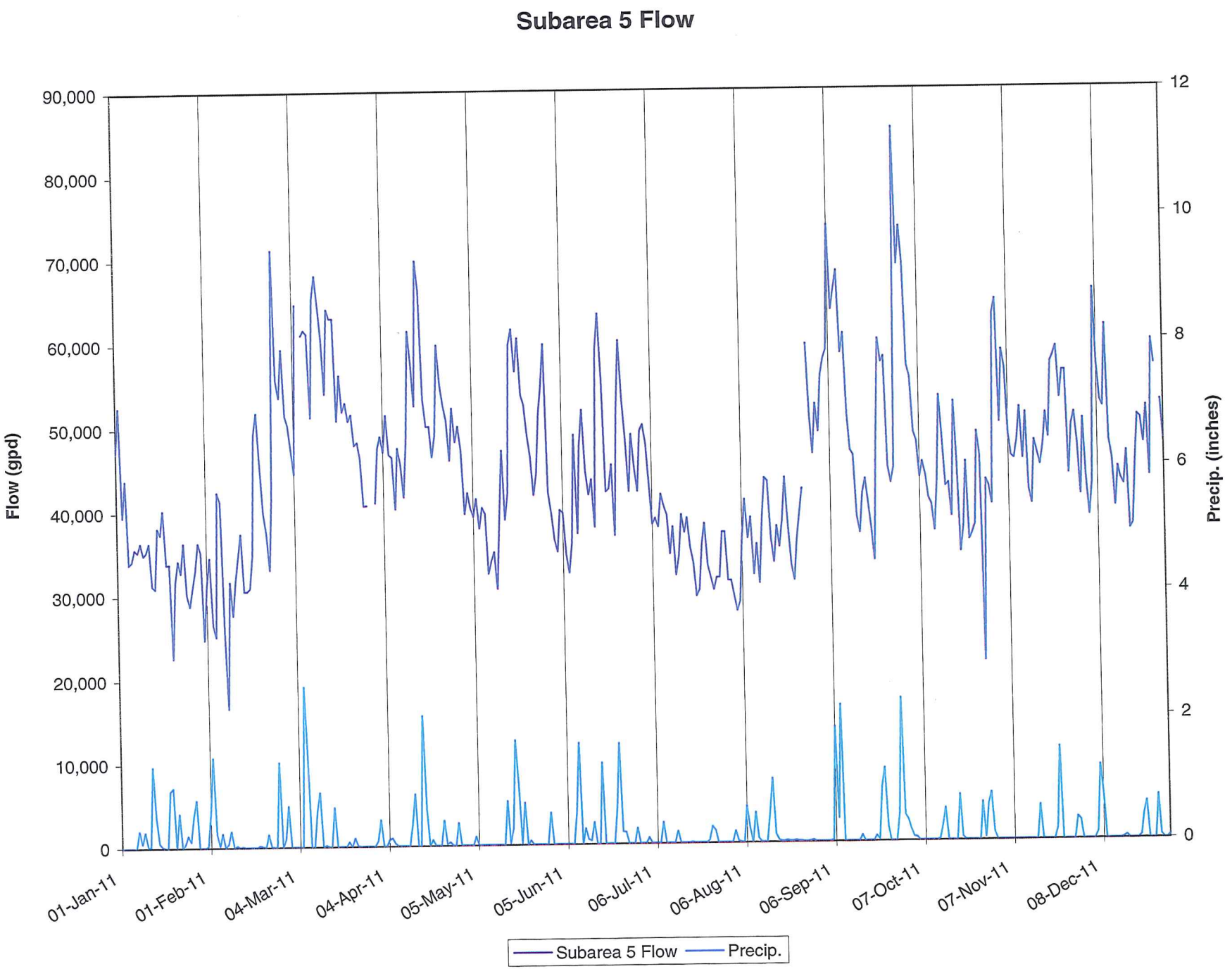
Attachment 3
Woodridge Lake Sewer District
Historical Flow Data

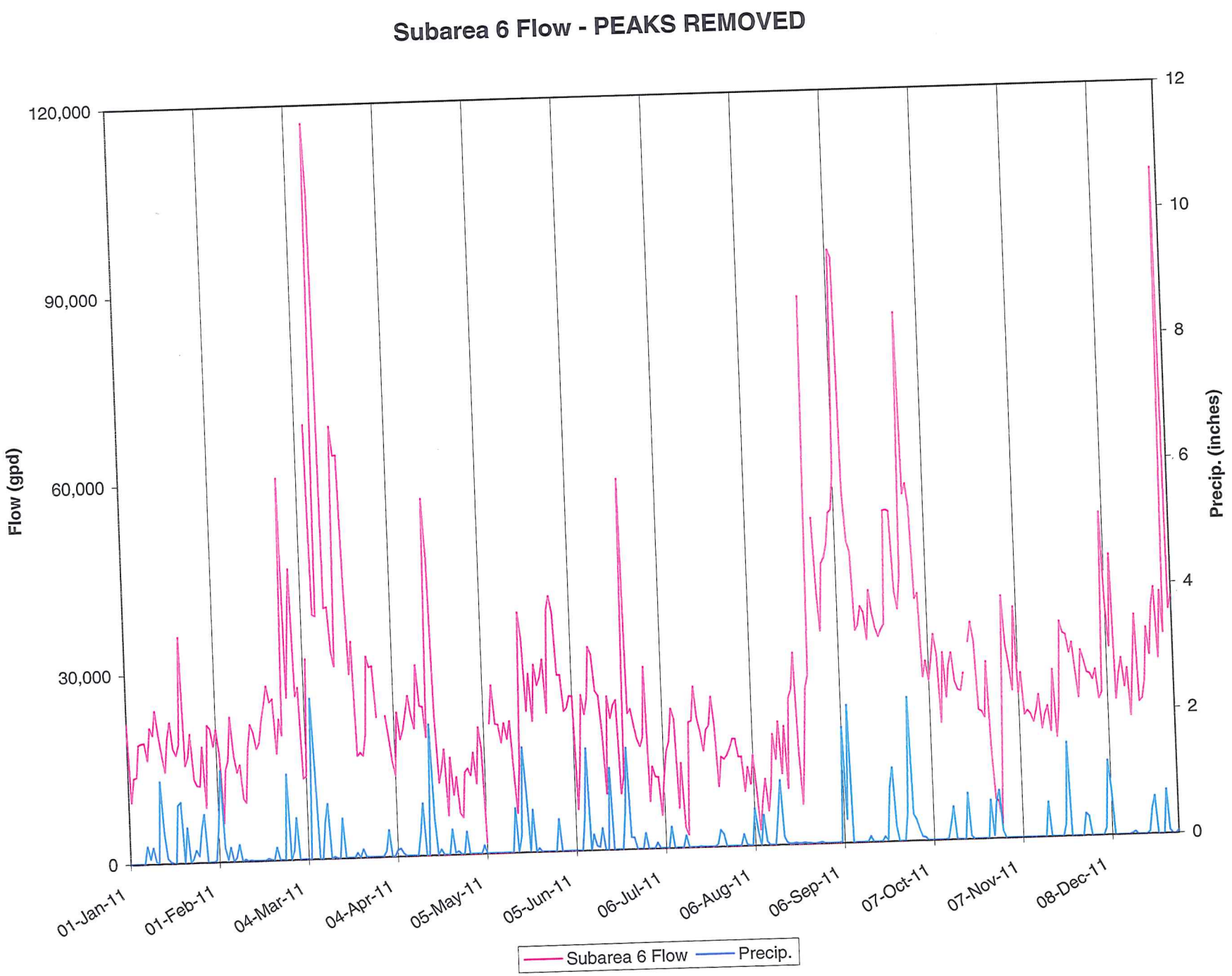

Monthly Average Daily Flow / Precipitation
Flow (gpd)
Precip. (inches)
0
10,000
20,000
30,000
40,000
50,000
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.40
0.45
0.50
January
February
March
April
May
June
July
August
September
October
November
December
Subarea 1
Subarea 6
Subarea 7
Subarea 8
Subarea 3
Subarea 2
Subarea 5
Precip.

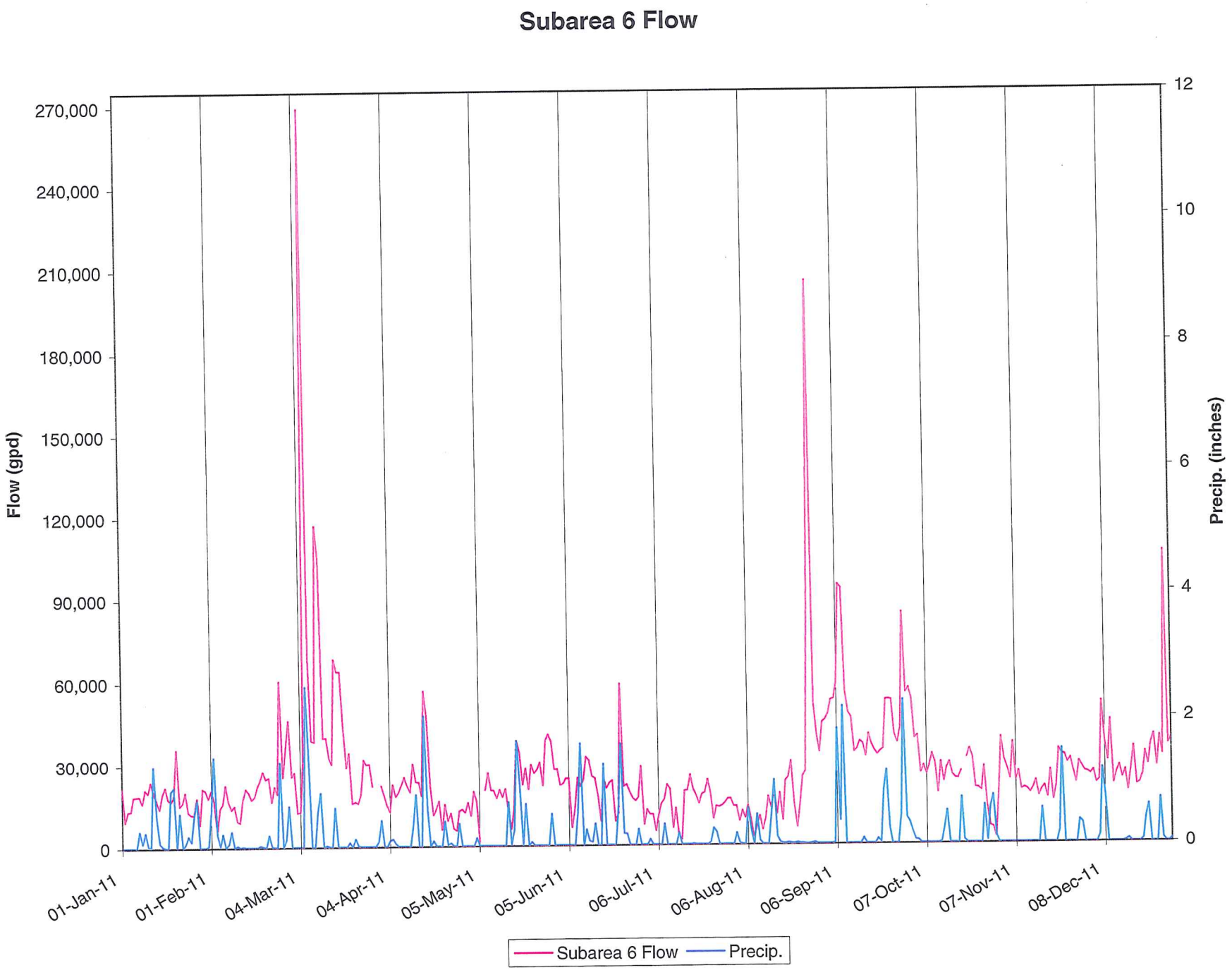

Subarea 1 Flow
Flow (gpd)
Precip. (inches)
25,000
20,000
15,000
10,000
5,000
0
12
10
8
6
4
2
0
01-Jan-11
01-Feb-11
04-Mar-11
04-Apr-11
05-May-11
05-Jun-11
06-Jul-11
06-Aug-11
06-Sep-11
07-Oct-11
07-Nov-11
08-Dec-11
Subarea 1 Flow
Precip.

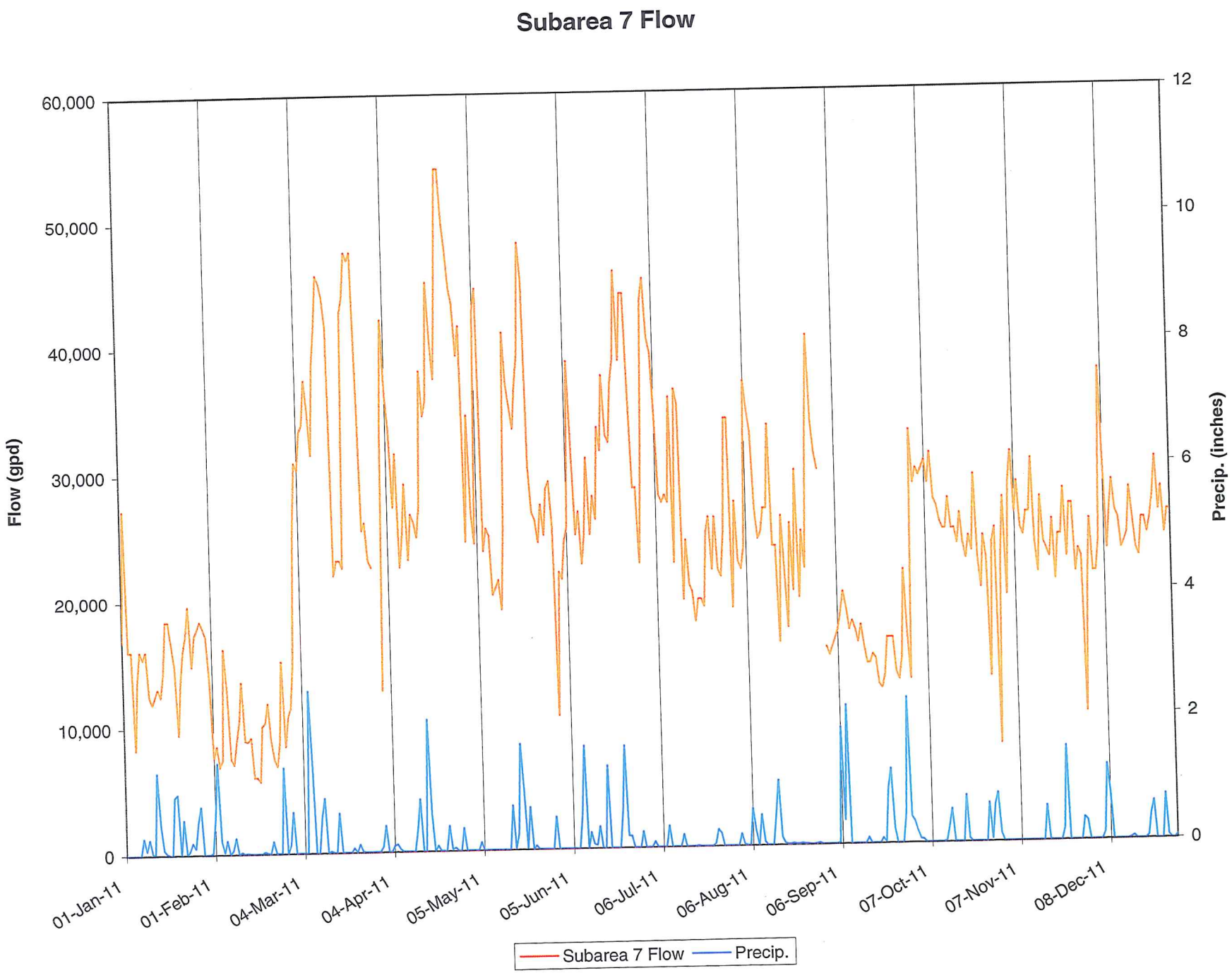

Subarea 2 Flow
Flow (gpd)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Precip. (inches)
12
10
8
6
4
2
0
01-Jan-11
01-Feb-11
04-Mar-11
04-Apr-11
05-May-11
05-Jun-11
06-Jul-11
06-Aug-11
06-Sep-11
07-Oct-11
07-Nov-11
08-Dec-11
Subarea 2 Flow
Precip.

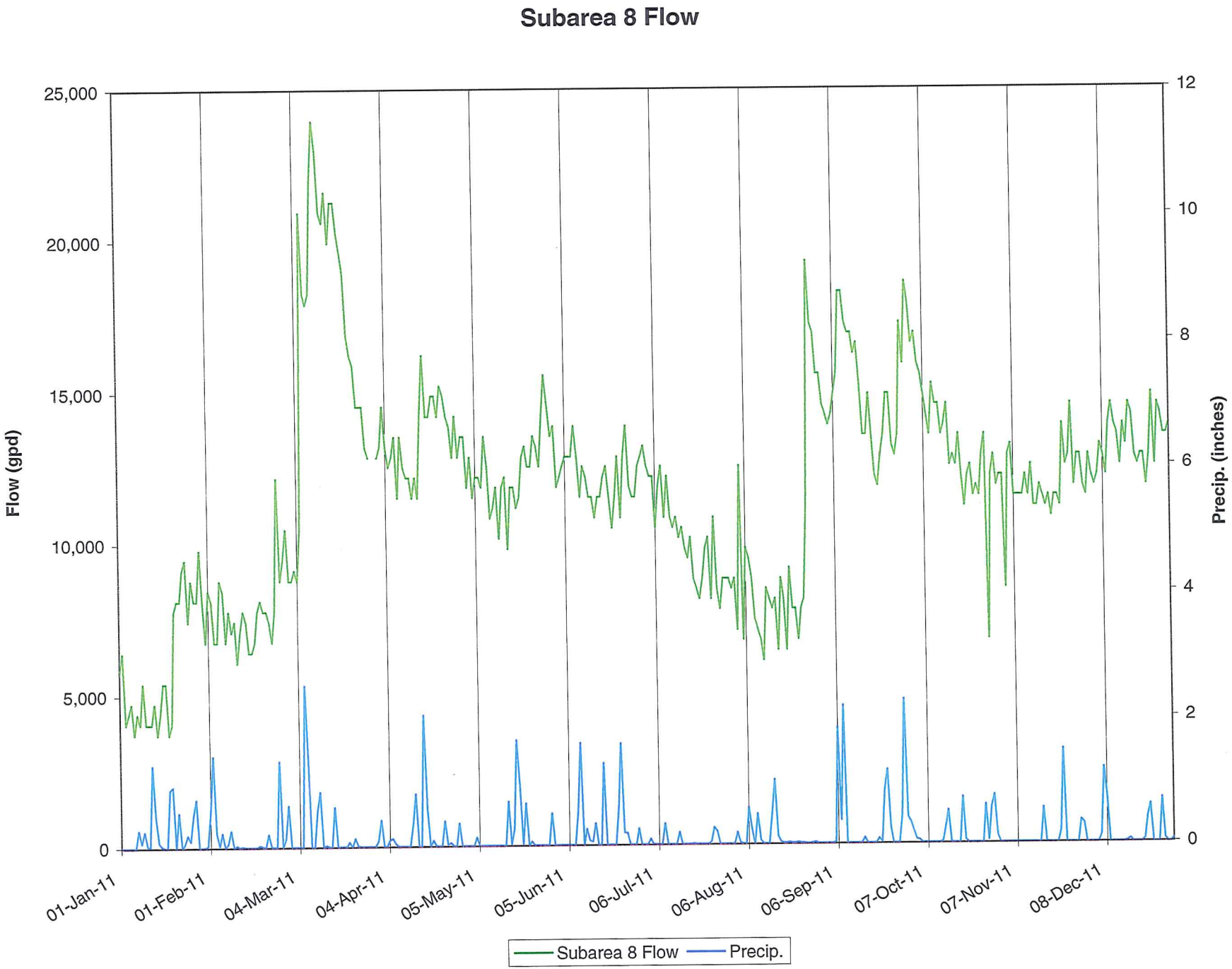

Subarea 3 Flow
Flow (gpd)
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Precip. (inches)
12
10
8
6
4
2
0
01-Jan-11
01-Feb-11
04-Mar-11
04-Apr-11
05-May-11
05-Jun-11
06-Jul-11
06-Aug-11
06-Sep-11
07-Oct-11
07-Nov-11
08-Dec-11
Subarea 3 Flow
Precip.


Subarea 5 Flow
Flow (gpd)
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Precip. (inches)
12
10
8
6
4
2
0
01-Jan-11
01-Feb-11
04-Mar-11
04-Apr-11
05-May-11
05-Jun-11
06-Jul-11
06-Aug-11
06-Sep-11
07-Oct-11
07-Nov-11
08-Dec-11
Subarea 5 Flow
Precip.

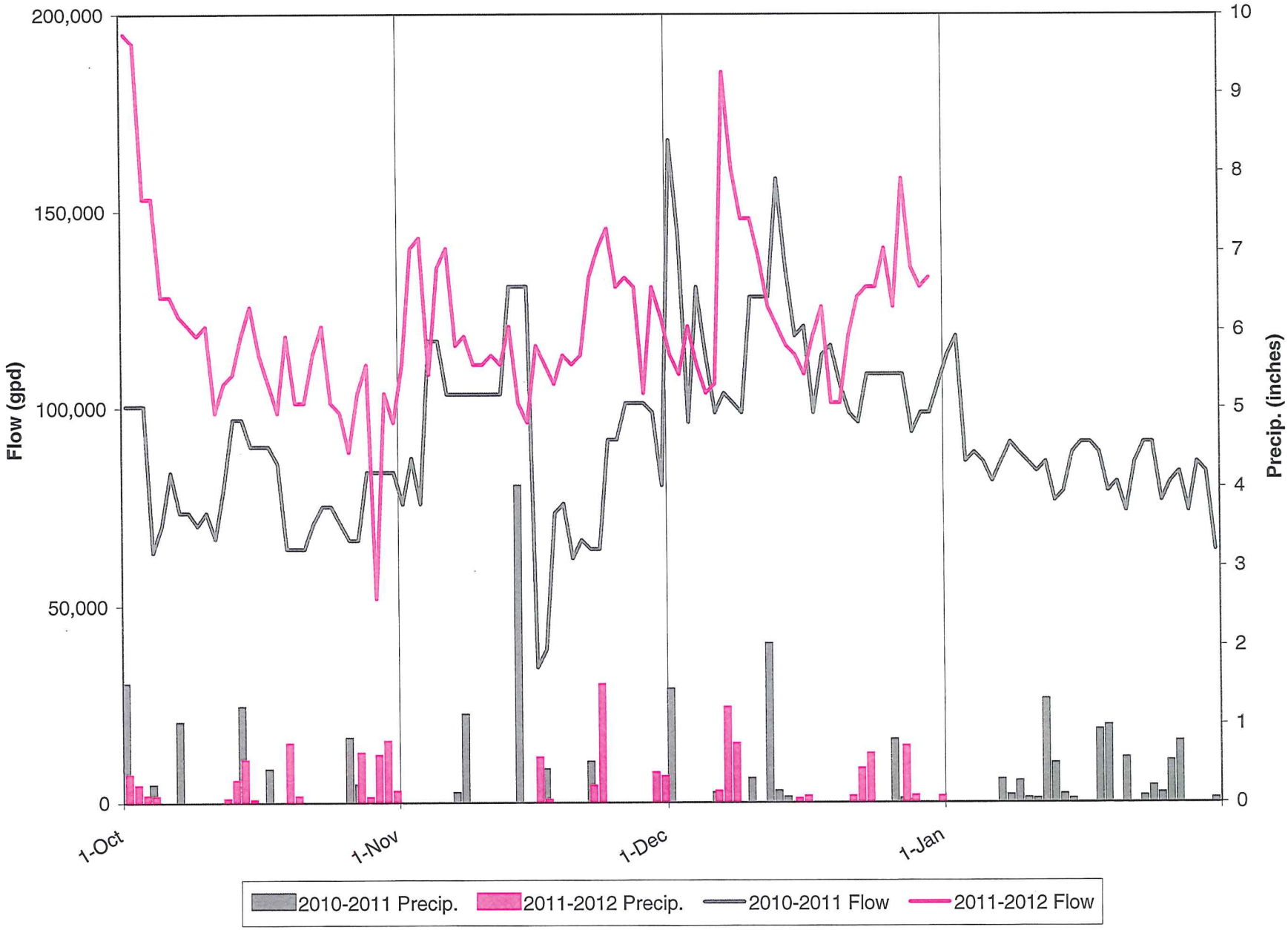

Subarea 6 Flow - PEAKS REMOVED
Flow (gpd)
120,000
90,000
60,000
30,000
0
Precip. (inches)
12
10
8
6
4
2
0
01-Jan-11
01-Feb-11
04-Mar-11
04-Apr-11
05-May-11
05-Jun-11
06-Jul-11
06-Aug-11
06-Sep-11
07-Oct-11
07-Nov-11
08-Dec-11
Subarea 6 Flow
Precip.


Subarea 6 Flow
Flow (gpd)
270,000
240,000
210,000
180,000
150,000
120,000
90,000
60,000
30,000
0
Precip. (inches)
12
10
8
6
4
2
0
01-Jan-11
01-Feb-11
04-Mar-11
04-Apr-11
05-May-11
05-Jun-11
06-Jul-11
06-Aug-11
06-Sep-11
07-Oct-11
07-Nov-11
08-Dec-11
Subarea 6 Flow
Precip.

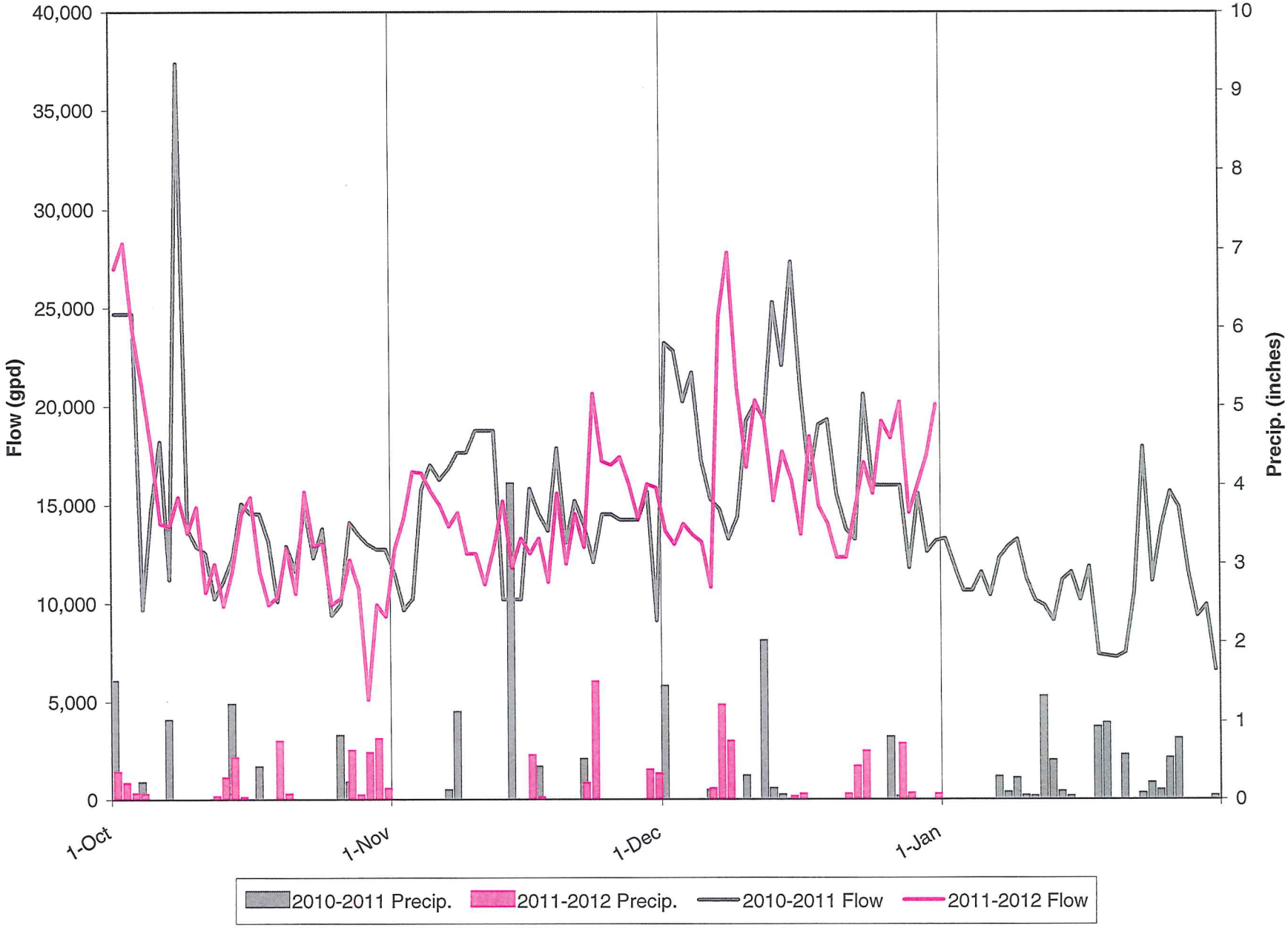

Subarea 7 Flow
Flow (gpd)
60,000
50,000
40,000
30,000
20,000
10,000
0
Precip. (inches)
12
10
8
6
4
2
0
01-Jan-11
01-Feb-11
04-Mar-11
04-Apr-11
05-May-11
05-Jun-11
06-Jul-11
06-Aug-11
06-Sep-11
07-Oct-11
07-Nov-11
08-Dec-11
Subarea 7 Flow
Precip.


Subarea 8 Flow
Flow (gpd)
25,000
20,000
15,000
10,000
5,000
0
Precip. (inches)
12
10
8
6
4
2
0
01-Jan-11
01-Feb-11
04-Mar-11
04-Apr-11
05-May-11
05-Jun-11
06-Jul-11
06-Aug-11
06-Sep-11
07-Oct-11
07-Nov-11
08-Dec-11
Subarea 8 Flow
Precip.

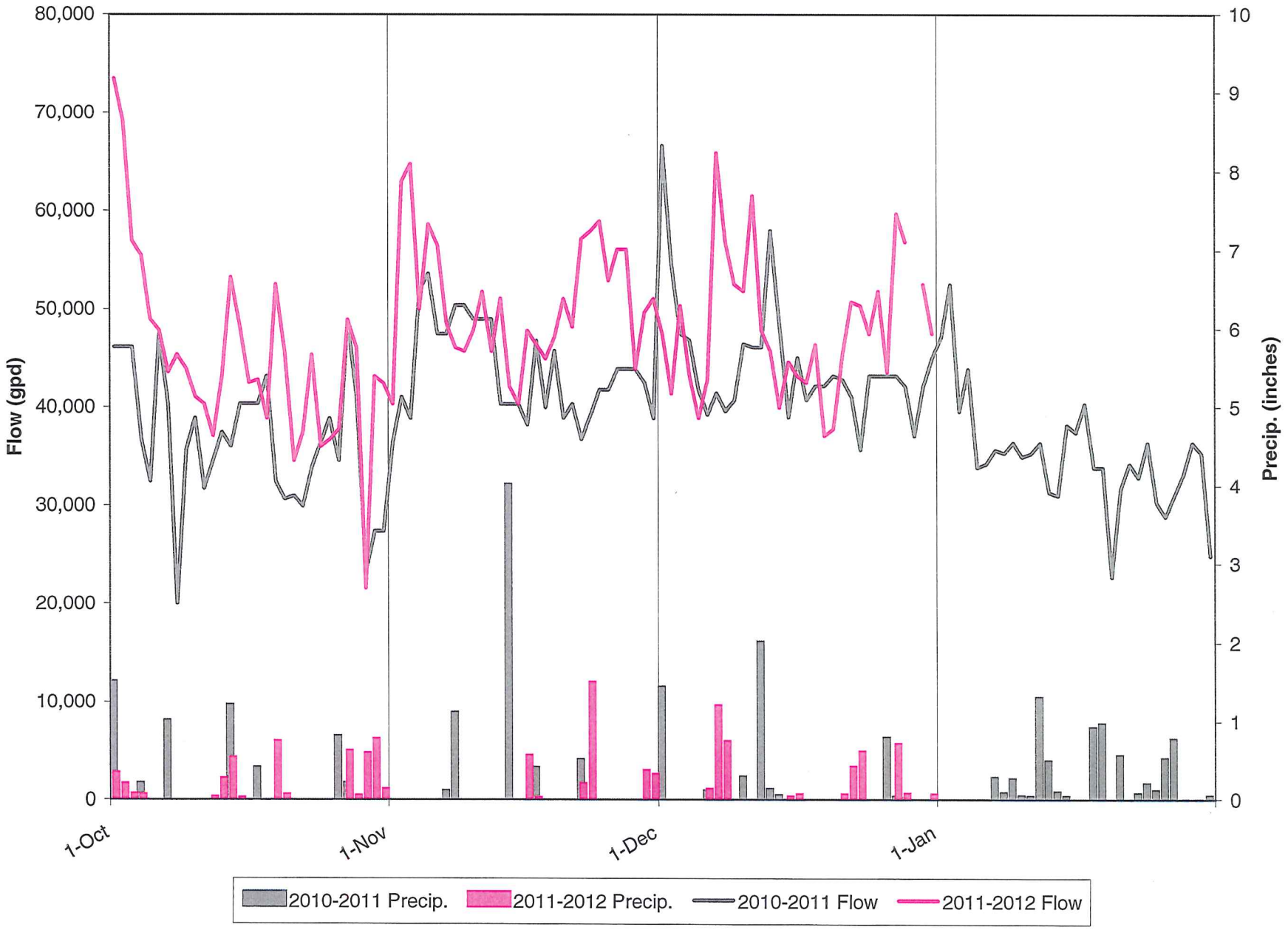
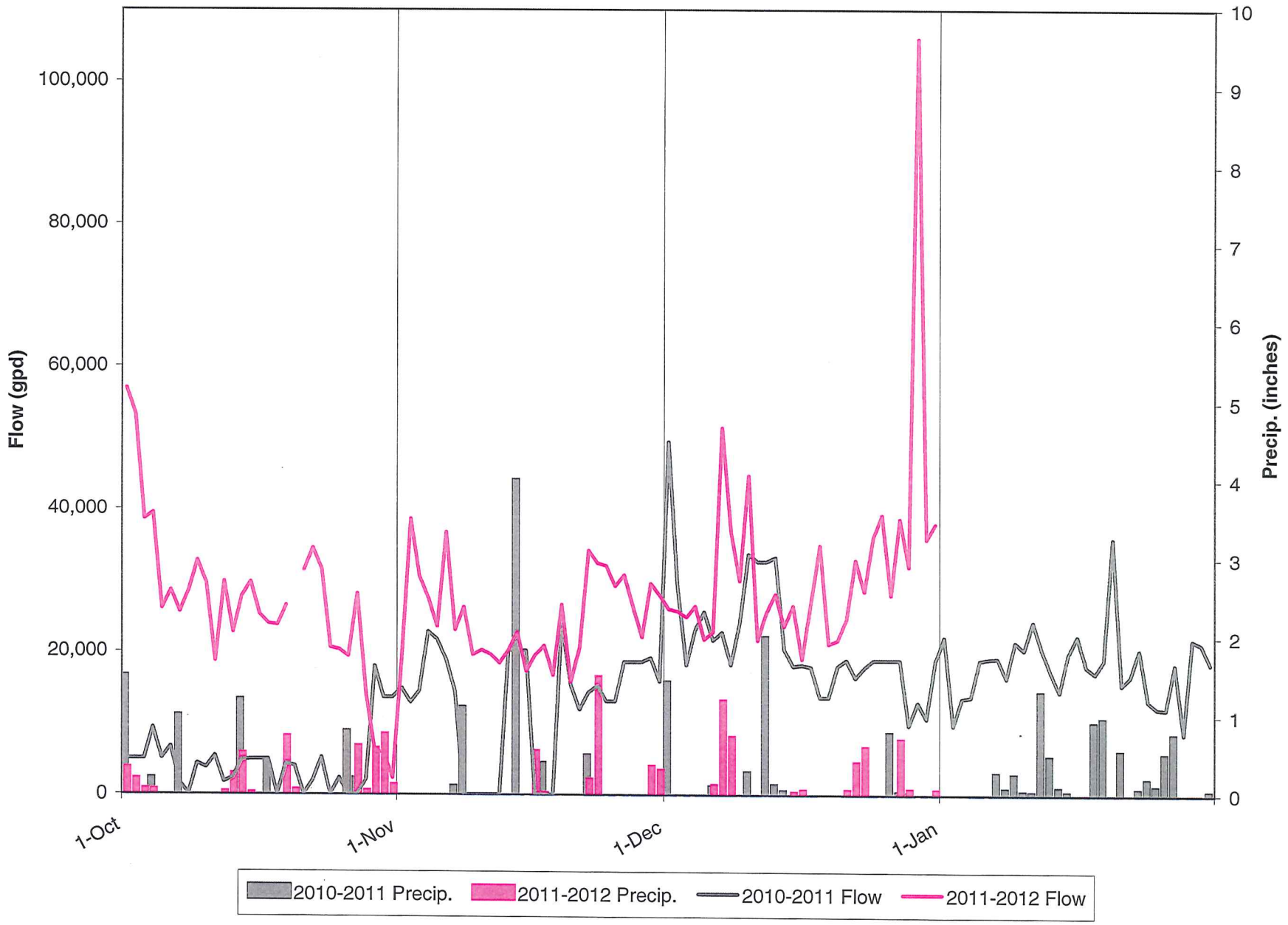
WLSD Total Flow



Subarea 3 Flow



Subarea 5 Flow



Subarea 6 Flow