

Bay West

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May 31, 2000

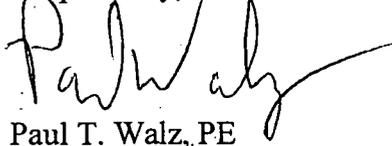
Mr. Joel Sanders
US Navy
Commanding Officer
1868 JOEL SANDERS
SOUTHNAVFACENGCOM
PO Box 190010
North Charleston, SC 29419-9010

**RE: Phase In/Phase Out Plan & April 2000 Treatment System Report
Naval Industrial Reserve Ordnance Plant, Fridley, Minnesota
Contract N68 950-99-D-0205**

Dear Joel:

Enclosed please find final versions of the above-referenced plan/reports for the Naval Industrial Reserve Ordnance Plant (NIROP) in Fridley, Minnesota. Bay West, Inc. (Bay West) has prepared these plan/reports in accordance with the requirements of the Contract Documents for the project. The Navy's comments from the draft plan/reports have been incorporated into the final versions of these documents. If you have any questions or comments regarding the information being submitted, please contact me at (651) 291-3491.

Respectfully,



Paul T. Walz, PE

cc: Lamar Sims, EFA Midwest (w/o enclosures)
Mark Sladic, Tetra Tech Nus, Inc.
Brandon Juran, Bay West, Inc.

BAY WEST

Monthly Project Status Report April 2000
Facility Maintenance
Naval Industrial Reserve Ordnance Plant - Fridley, Minnesota
Prepared by Bay West

Southern Division - District II
Contract No. N68950-99-Q-0205

OVERVIEW

On April 13, 2000, Bay West took responsibility from Morrison Knudsen (MK) for the operation and maintenance (O&M) of the ground water treatment facility (GWTF) at the Naval Industrial Reserve Ordnance Plant (NIROP) in Fridley, Minnesota. Prior to the change, MK trained Bay West personnel for a period of 30 days. The training period included: daily operation of the system; layout of the operation and maintenance manual; common alarms; and routine maintenance.

SYSTEM OVERVIEW

- The GWTF was in operation for 720 hours during the month of April.
- The on-stream factor for April was 100%. The on-stream factor is the actual operation time divided by the available operation time.
- The system processed 25,899,000 gallons of ground water in April, for a total of 393,069,000 gallons to date. All processed water was discharged to the storm sewer.
- Effluent sampling from outfall 020 was performed on April 7 and 17. The laboratory results indicate the effluent continues to meet NPDES discharge criteria.
- Influent and effluent samples were taken on April 18 to assess polymer effectiveness. The results suggested the polymer was working properly. Ray Rivard from Nalco ran field tests on April 28 and came to the same conclusion.

SCHEDULED MAINTENANCE

- E.H. Renner cleaned the pump for extraction well AT-2. In addition they washed the screen for the extraction well and removed approximately 20 gallons of sand from the bottom of the well.
- Changed the stainless-steel grounding rings on FQI 401, which were corroded from the concentrated acid that was in the line.
- Changed the fuse on LS 502.
- Cleaned the level probe on LS 103.
- Serviced the fire extinguishers.

PROBLEMS AND SOLUTIONS

- No problems this month.

TABLES

1. Ground Water Treatment Facility (GWTF) Operations

FIGURES

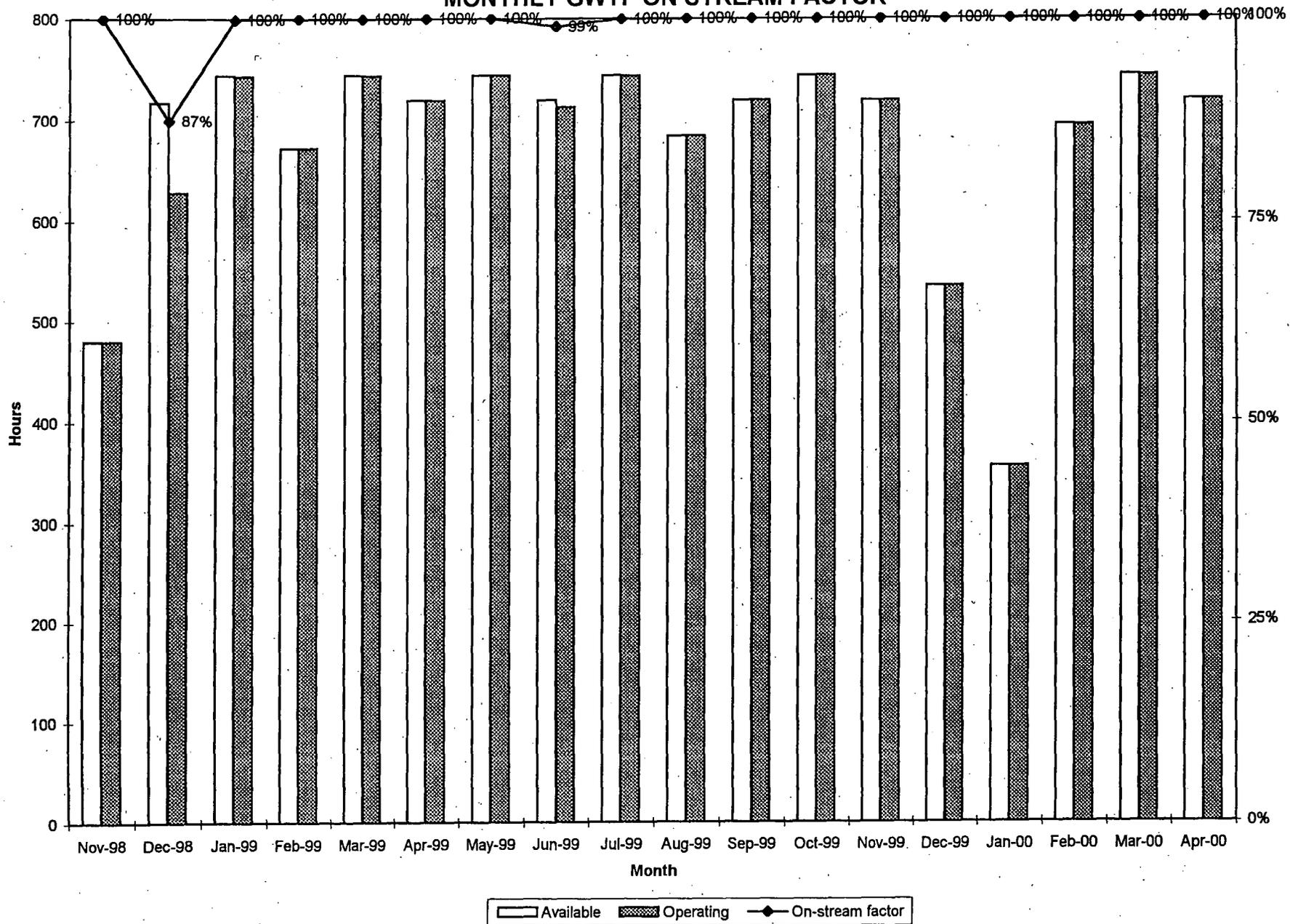
1. Monthly GWTF On Stream Factor
2. GWTF Total Treated Flow
3. Total Discharge

NIROP FRIDLEY
Ground Water Treatment Facility (GWTF)

Month	OPERATIONS (hrs)			WATER DISCHARGED (thousands of gallons)					WATER TREATED (thousands of gallons)	
	Available	Operating	On-stream factor	to Storm	to Sanitary	Untreated to Sanitary	Total to Sanitary	% Storm	Monthly	Cumulative
Nov-98	480	480	100%	0	17,524	0	17,524	0%	17,524	17,524
Dec-98	718	628	87%	16,078	7,087	0	7,087	69%	23,165	40,689
Jan-99	744	743	100%	25,571	0	0	0	100%	25,571	66,260
Feb-99	672	672	100%	23,938	0	0	0	100%	23,938	90,198
Mar-99	744	744	100%	27,394	0	0	0	100%	27,394	117,592
Apr-99	720	720	100%	25,254	0	0	0	100%	25,254	142,846
May-99	744	744	100%	23,291	0	0	0	100%	23,291	166,137
Jun-99	720	713	99%	25,823	0	0	0	100%	25,823	191,960
Jul-99	744	744	100%	22,266	0	0	0	100%	22,266	214,226
Aug-99	684	684	100%	21,634	0	0	0	100%	21,634	235,860
Sep-99	720	720	100%	18,205	0	0	0	100%	18,205	254,065
Oct-99	744	744	100%	23,029	0	0	0	100%	23,029	277,094
Nov-99	720	720	100%	22,783	0	0	0	100%	22,783	299,877
Dec-99	535	535	100%	12,818	0	0	0	100%	12,818	312,695
Jan-00	356	356	100%	10,400	0	0	0	100%	10,400	323,095
Feb-00	695	694	100%	16,944	0	0	0	100%	16,944	340,039
Mar-00	744	744	100%	27,131	0	0	0	100%	27,131	367,170
Apr-00	720	720	100%	25,899	0	0	0	100%	25,899	393,069

NIROP FRIDLEY

MONTHLY GWTF ON STREAM FACTOR

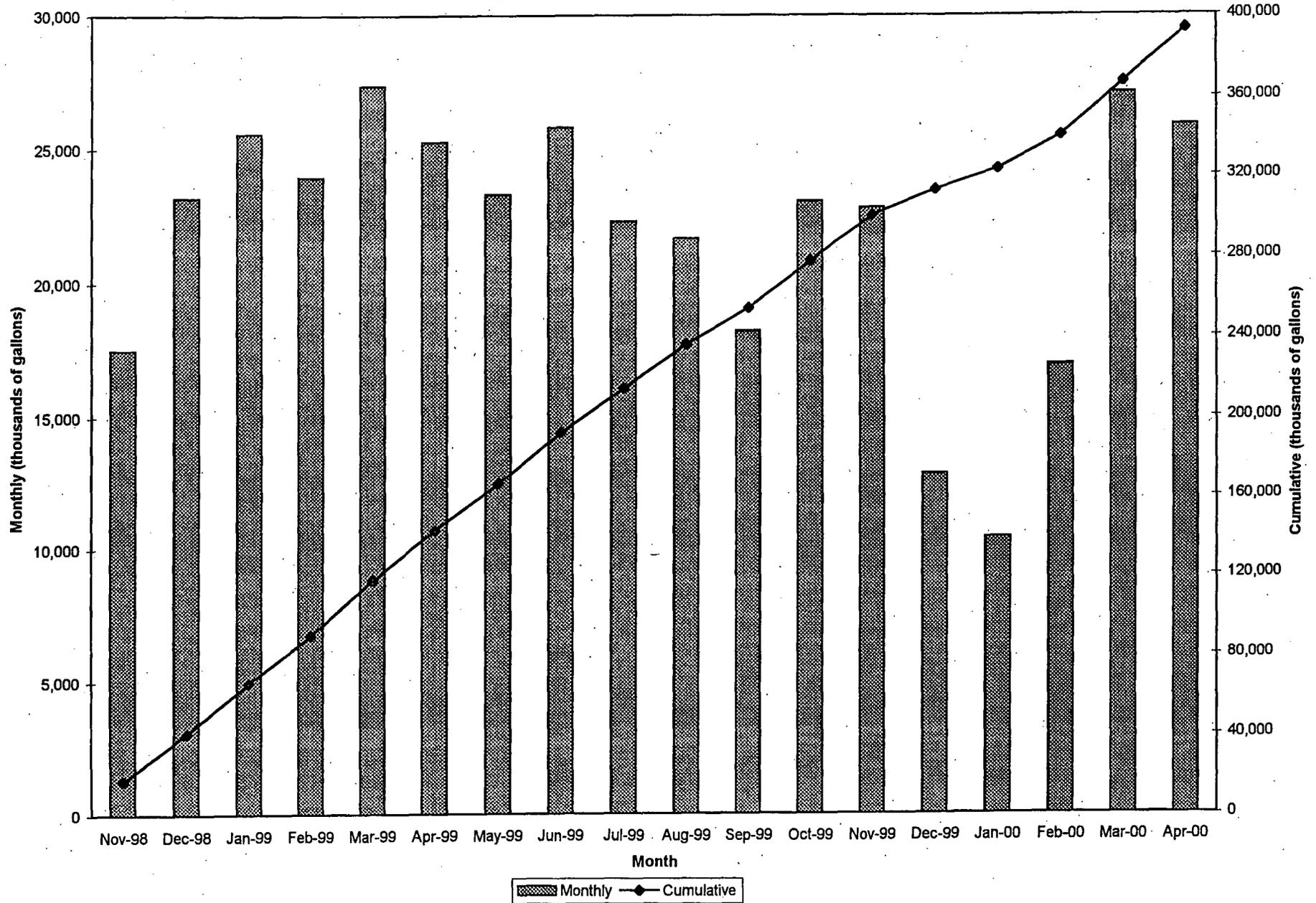


O&M Start Date: 11 November 1998

FIGURE 1

Available hours are 24 hours per day, less scheduled down time and power outages.

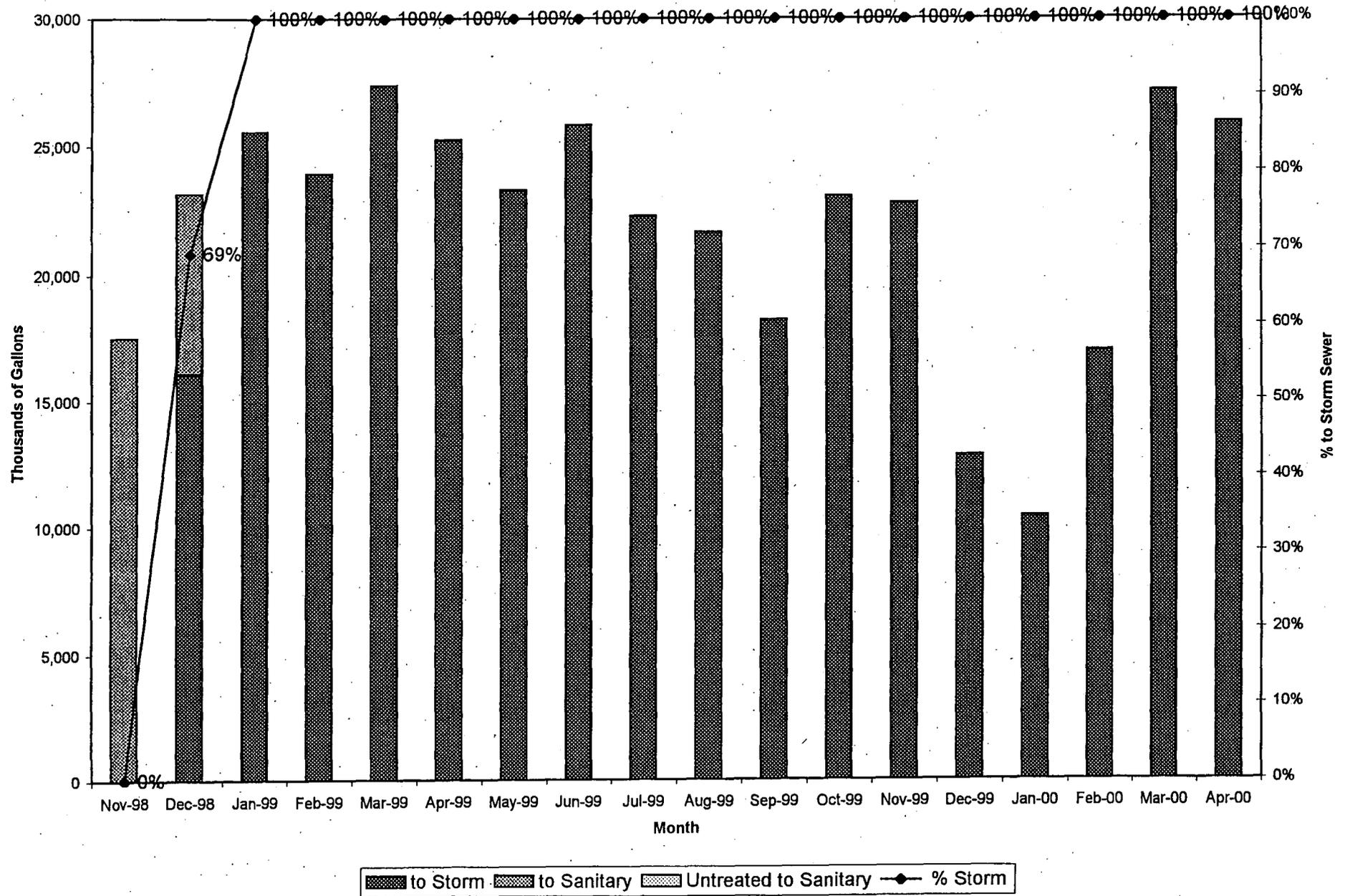
NIROP FRIDLEY GWTF TOTAL TREATED FLOW



O&M Start Date: 11 November 1998

FIGURE 2

NIROP FRIDLEY TOTAL DISCHARGE



O&M Start Date: 11 November 1998

FIGURE 3