

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF
TARRANT COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER ONE
HELD ON THE 4TH DAY OF MAY, 1987 AT 10:00 A.M.

The call of the roll disclosed the presence or absence of
Directors as follows:

<u>Present</u>	<u>Absent</u>
C. Victor Thornton George W. Shannon Wayne E. Newton Burford I. King	Victor W. Henderson

Also present were James Oliver, General Manager; Alan Thomas, Director of Administration; Robert Doby, Comptroller; Woody Frossard, Manager of Oil and Gas; Steve Christian, Real Property Manager; Wayne Owen, Administrative Analyst; Bob Thompson of Freese and Nichols; George Christie, Legal Counsel and Larry Wortham, Administrative Assistant.

1.

On motion made by Director Shannon and seconded by Director Newton and with the assurance from management that all requirements of law relating to the "open meetings" law had been met, the minutes of the meeting held April 22 were unanimously approved by the Directors present and it was accordingly ordered that such minutes be placed in the permanent files of the District.

2.

Director Shannon reiterated that the District staff contact

the risk managers of Tarrant County and the City of Fort Worth in order to ascertain the feasibility of entering into a joint risk management program with the City and County.

3.

EXECUTIVE SESSION

Bob Thompson of Freese and Nichols informed the Board of Directors of elements and variables used in determining the control of flood water in the West Fork System. Mr. Thompson based his presentation on the following memorandums:

MEMORANDUM TO FILE

FROM: JOHN LEE RUTLEDGE AND RONNIE M. LEMONS
SUBJECT: ANALYSIS OF OPERATION OF EAGLE MOUNTAIN DAM DURING STANDARD PROJECT AND PROBABLE MAXIMUM FLOODS
DATE: APRIL 30, 1987

1. The floods evaluated are based on Freese and Nichols 1979 study of Lake Worth Dam for the City of Fort Worth.
2. Operations of the gates at Eagle Mountain and Bridgeport Dams pursuant to the attached F & N memo of June 18, 1986.
 - a. This procedure does not take into account present District practice to minimize flood damage on the lakes. Gates are operated to discharge as much inflow as possible for smaller floods, then control larger floods to limit flows in the West Fork floodway.

b.	Flood (at Lake Worth)*	Bridgeport Max. El.	Egl. Mtn. Max. El.	L. Worth Max. El.	Floodway Max. El.
	SPF	851.6	674.2	602.5	55,000
	PMF	865.5	681.8	613.9	249,000

3. Operation of the gates at Eagle Mountain and Bridgeport Dam is pursuant to present practice, i.e.:

a. Discharge limited to 3,000 cfs from Bridgeport until reservoir reaches el. 839.5 (3.5 ft. above NWL), then operate according to F & N memo of June 18, 1986.

b. Discharge limited to 6,000 cfs from Eagle Mountain until reservoir reaches el. 650.6 (1.5 ft. above NSL), then operate according to F & N memo of June 18, 1986.

c.

<u>Flood</u> <u>(at Lake Worth)*</u>	<u>Bridgeport</u> <u>Max. El.</u>	<u>Egl. Mtn.</u> <u>Max. El.</u>	<u>L. Worth</u> <u>Max. El.</u>	<u>Floodway</u> <u>Max. El.</u>
SPF	852.4	673.8	602.5	55,000
PMF	866.1	681.8	613.9	249,000

4. Lowering Bridgeport and Eagle Mountain 2.0 feet at start of flood. Using operating procedures stated in 3 above.

<u>Flood</u> <u>(at Lake Worth)</u>	<u>Bridgeport</u> <u>Max. El.</u>	<u>Egl. Mtn.</u> <u>Max. El.</u>	<u>L. Worth</u> <u>Max. El.</u>	<u>Floodway</u> <u>Max. El.</u>
SPF	851.6	673.1	602.5	55,000
PMF	865.7	681.6	613.7	249,000

5. Using the present gate operation procedures and lowering the lakes in anticipation of floods have little effect on SPF or PMF water levels and downstream flows. They will affect the water levels and downstream flows during small floods.

* SPF = Standard Project Flood - 11 inches in 24 hours
PMF = Probable Maximum Flood - 29 inches in 72 hours

MEMORANDUM TO FILE

FROM: JOHN LEE RUTLEDGE AND R. M. LEMONS

RE: TARRANT COUNTY WATER CONTROL AND
IMPROVEMENT DISTRICT NUMBER ONE
WEST FORK GATE OPERATIONS

DATE: JUNE 18, 1986

The following is a summary of the gate operation procedures devised during 1979 to limit the flow in the West Fork of the Trinity River. In the late 1960's, modifications had been made to the Bridgeport and Eagle Mountain spillways to enable the reservoirs to safely pass the Probable Maximum Flood (PMF). However, since greater releases could then be made at lower lake levels, it became possible for the West Fork floodway to exceed its 55,000 cfs capacity at less than the Standard Project Flood (SPF), for which it had been designed. To ensure that the floodway could pass the SPF, the following procedures were devised.

A. BRIDGEPORT OPERATIONS

1. Discharge set equal to inflow until all gates are open.
2. Allow reservoir to rise to elevation 841.0, 5.0' above NWL.
3. Lower gates as reservoir continues to rise to hold the discharges at 27,000 cfs.
4. Before gates are overtopped, at approximately elevation 853, raise gates fully.

B. EAGLE MOUNTAIN LAKE OPERATIONS

1. Discharge set equal to inflow until all gates are open.
2. Allow reservoir to rise to elevation 669.7, 20.6' above NWL.
3. Lower service spillway gates as reservoir continues to rise to hold the discharges at 55,000 cfs.
4. When reservoir rises to 676.0, open all gates and destroy fuse plug.

C. LAKE WORTH OPERATIONS

Uncontrolled spillway.

The probable flood levels with and without gate operation procedures are given in Table 1 and pertinent data on Bridgeport and Eagle Mountain are given in Table 2. Before these operation plans are adopted all structures, especially gates, should be analyzed to assure that the increased hydraulic loads can be withstood.

TABLE 1

FLOOD LEVELS

	<u>With Gate Operation</u>			<u>With Gate Operation</u>		
	Max. Elev. (Ft.)	Max. Dis. (cfs)	Max. Area (Ac.)	Max. Elev. (Ft.)	Max. Dis. (cfs)	Max. Area (Ac.)
BRIDGEPORT						
Oct. 1981	-	-	-	836.0	4,840	12,941
Oct. 1981 (NWL)	-	-	-	841.8	26,660	14,392
SFP	853.0	27,000	17,550	849.1	45,560	16,318
PMF	871.1	113,440	24,143	871.0	113,100	24,100
EAGLE MOUNTAIN						
100 year	657.35	22,300	11,555	657.35	22,300	11,555
Oct. 1981	-	-	-	655.9	21,521	11,260
Oct. 1981 (NWL)*	-	-	-	663.2	37,683	13,592
SFP	675.1	55,000	18,667	675.1	74,090	18,667
PMF	681.7	246,400	21,518	681.8	249,000	21,562
LAKE WORTH						
100 year	599.4	24,800	4,893	599.4	24,800	4,893
Oct. 1981	-	-	-	598.2	17,610	4,450
Oct. 1981 (NWL)*	-	-	-	-	-	-
SPF	602.5	55,400	5,322	604.1	73,247	5,596
PMF	DAM IS OVERTOPPED					

* Reservoirs at NWL before flood started.
- Not available.

TABLE 2
PERTINENT DATA

<u>Worth</u>	<u>Bridgeport</u>	<u>Eagle Mountain</u>	<u>Lake</u>
Service Spillway			
- description controlled	8 vertical gates	side channel: 6 gates, uncontrolled weir @ 659.0 service 3 gates, 1 uncontrolled bay @ 652.0	weir
- crest elev.	820.0	side channel: 637.0 service: 649.1	594.3
Emergency Spillway			
- crest elev.	866.0	670.0	-
- fuse plug crest	-	676.0	-
Normal Water Level	836.0	649.1	594.3
Top of Flood Easement			
- elevation	851	668.0	-
- area covered (ac.)	16,570	11,750	-
Top of Dam	874.0	682.0	606.3

4.

Director Shannon moved to authorize staff to commence eminent domain proceedings to acquire 5.577 acres in easement for the total appraised value of \$9,850.00 from the J. R. Ferguson Estate. The land will be used for the construction of the Richland-Chambers reservoir. Director King seconded the motion and the vote in favor was unanimous.

5.

Director King moved to authorize staff to execute an agreement with Lone Star Gas Company for the replacement of 4" M-19 Pipeline, 8" and 10" line M pipeline and abandoned 4" line MAD pipeline. The total cost of this will be \$213,171.00. Director Newton seconded the motion and the vote in favor was unanimous.

6.

Director Shannon moved to award a bid for two ball valves to Willamette Valve, Inc. for \$51,300.00. Director King seconded the motion and the vote in favor was unanimous.

7.

Director King moved to adopt a resolution calling for the establishment of an enforcement division within the District. The proposed resolution is as follows:

RESOLUTION OF THE BOARD OF DIRECTORS OF TARRANT
COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT
NUMBER ONE REQUESTING OFFICIAL DESIGNATION OF THE
DISTRICT'S LAW ENFORCEMENT DIVISION BY THE TEXAS
COMMISSION ON LAW ENFORCEMENT OFFICER STANDARDS AND EDUCATION

WHEREAS, THE DISTRICT, recognizes the need to employ and commission licensed Peace Officers for the enforcement of the

District's Ordinances, for the monitoring of public use of and access to the District's Reservoirs, for the providing of security for District maintained facilities, and for the enforcement of safety measures upon and around the District's Reservoirs; and

WHEREAS, THE DISTRICT has complied with all State laws pertaining to the employment and commissioning of Peace Officers and desires to have its Law Enforcement Division officially designated by the State of Texas; and

WHEREAS, THE DISTRICT, as provided in Section 51.132 of the Texas Water Code, has the power to employ Peace Officers with the following limited powers:

1. To make arrests when necessary to prevent or abate the commission of any offense against the regulations of the District and against the laws of the State when the offense or threatened offense occurs on any land, water, or easement owned or controlled by the District; or
2. To make an arrest in case of an offense involving injury or detriment to any property owned or controlled by the District.
3. Peace Officers employed and commissioned under this section must be certified by the Commission on Law Enforcement Officer Standards and Education under Chapter 546, Acts of the 59th Legislature, Regular Session, 1965, as amended (Article 4413 (29aa), Vernon's Texas Civil Statutes).

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Tarrant County Water Control and Improvement District Number One that the District herewith requests that the Texas Commission on Law Enforcement Officer Standards and Education officially designate the Law Enforcement Division of the District as being in compliance with the requirements and regulations required for all officially designated law enforcement agencies of the State of Texas.

Passed and approved this 4th day of May 1987.

C. Victor Thornton
President

ATTEST:

George W. Shannon
Secretary

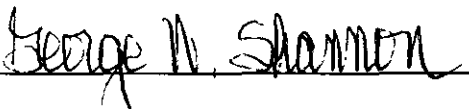
Director Shannon seconded the motion. Director King, Shannon and Thornton voted in favor of adopting the resolution. Director Newton abstained from the vote.

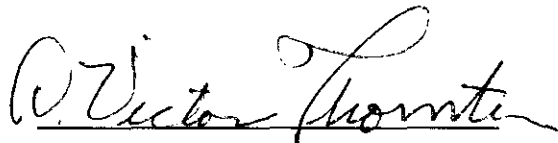
8.

Director Newton next moved to commission Tommy W. Saylor and Tony G. Veltre as District Lake Patrol Officers. Director King seconded the motion and the vote in favor was unanimous.

9.

There being no further business before the Board of Directors, the meeting adjourned.


Secretary


President