# Appendix D 1988 Final Judgment and Decree

# NO. 115,414-A-1

IN RE: THE EXCEPTIONS OF \$ IN THE DISTRICT COURT OF THE LOWER COLORADO RIVER \$ AUTHORITY AND THE CITY OF \$ BELL COUNTY, TEXAS OF WATER RIGHTS IN THE \$ LOWER COLORADO RIVER SEGMENT \$ OF THE COLORADO RIVER BASIN \$ 264TH JUDICIAL DISTRICT

# FINAL JUDGMENT AND DECREE

BE IT REMEMBERED that on the <u>20</u> day of <u>Upril</u>, 1988 came on to be heard the Joint Motion to Enter Final Judgment and Decree of the Texas Water Commission (the "Commission"), the Lower Colorado River Authority ("LCRA"), and the City of Austin (the "City"), and the Court being of the opinion that said motion should be granted, it is therefore,

ORDERED, ADJUDGED AND DECREED as follows:

I.

The City's water rights are defined by the findings of fact and conclusions of law found on pages 21-23 of the Final Determination entered by the Commission on July 29, 1985 in this matter (the "Final Determination"). These findings and conclusions are hereby modified in their entirety to read as set forth in Attachment No. 1 hereto.

Bh. 542-Prep 761

LCRA's water rights with respect to the Highland Lakes are defined by the findings and conclusions found on pages 89-96 of the Final Determination. The findings and conclusions found on pages 90-91 relating to the Highland Lakes generally are hereby deleted in their entirety, and the remaining findings and conclusions relating to each of the Highland Lakes specifically are hereby modified in their entirety to read as set forth in Attachment No. 2 hereto.

## III.

LCRA's water rights with respect to its Lakeside Water Division are defined by the findings and conclusions found on pages 76-77 of the Final Determination. These findings and conclusions are hereby modified in their entirety to read as set forth in Attachment No. 3 hereto.

# IV.

LCRA's water rights with respect to its Gulf Coast Water Division are defined by the findings and conclusions found on pages 82-84 of the Final Determination. These findings and conclusions are hereby modified in their entirety to read as set forth in Attachment No. 4 hereto.

v.

All other portions of the Final Determination which define water rights of the City and LCRA are hereby affirmed.

## VI.

This Final Judgment and Decree is final and conclusive as to all water rights and claims to water rights of the City and LCRA in the Lower Colorado River Segment, Colorado River Basin, as adjudicated herein. This Judgment is without prejudice to any further permits or amendments to the water rights of the City and LCRA issued by the Texas Water Commission after January 1, 1983. Such amendments shall be treated as if issued under § 11.336 of the Texas Water Code. All claims of water rights of the City and LCRA as of January 1, 1983 which were made under § 11.303 or § 11.307 of the Texas Water Code and which are not recognized herein or in other orders of the Court are hereby denied.

## VI.

The Texas Water Commission is directed to take such action as is required by the Texas Water Rights Adjudication Act, §§ 11.301 et seq., Texas Water Code, to implement this Final Judgment and Decree.

SIGNED	this 20 day of April , 1988.
9 9	
	JUDGE PRESIDING

# MODIFIED FINDINGS AND CONCLUSIONS DEFINING LCRA'S WATER RIGHTS WITH RESPECT TO THE HIGHLAND LAKES

WATER RIGHT CLAIMS

OF THE

LOWER COLORADO RIVER AUTHORITY (LCRA)

IN

THE HIGHLAND LAKES

LOWER COLORADO RIVER

SEGMENT ADJUDICATION

DIVERSION POINTS NOS. (MCRS): 2280 and 2290 (Lake Buchanan) TRACT NO: None

OWNERSHIP: Lower Colorado River Authority (LCRA)

IR. (MCRS): 250-252 APP. (MCRS): 25-26 XII/II SF 1-1128

(MCRS) II Contest SF 95-138

(LCRS) Contest SF Vols. III, IV, V and VII

SECTION 11.307 CLAIM: Under Permits Nos. 954 and 1259 and Section 11.303 Claim No. 5550 to maintain a dam and 992,475 acre-foot capacity reservoir on the Colorado River (Lake Buchanan) and to impound, divert and use therefrom 1,391,530 acre-feet of water per year at a maximum diversion rate of 3630 cfs for "hydroelectric, municipal, domestic, industrial, etc." purposes, with a priority date of June 29, 1913 and prior. (Exh. J8)

# FINDINGS:

- The LCRA is the owner of Permit No. 1259, which authorized the construction and maintenance of a dam and approximately 1,000,000-acre-foot capacity reservoir on the Colorado River in Llano and Burnet Counties and the impoundment, diversion and use therefrom of 1,391,530 acre-feet of the ordinary and storm and flood flows of the Colorado River for domestic, municipal, (industrial), irrigation, mining and hydroelectric power purposes. (Exh. 10a)
- A special condition in Permit No. 1259 authorizes the LCRA to use the bed and banks of the Colorado River for the purpose of conveying the impounded water to diversion points downstream for the uses authorized. (Exh. J10a)
- Another special condition in the permit concerns Permit No. 954:

The dam for which this permit is granted has been constructed by virtue and under the terms of Permit No. 954, heretofore granted by the Board to the Syndicate Power Company of Dallas, Texas, and the alterations and modifications thereof heretofore set out by declarations filed with the Board, as prescribed by Statute, and this permit shall be cumulative of and in addition to said Permit No. 954, and of the rights covered by said permit; provided that the total quantity of water to be impounded, diverted and appropriated shall not exceed the quantity set out in paragraph four of this permit.

(Exh. J10a)

4. Paragraph four of Permit No. 1259 recites that of the 1,391,530 acre-feet authorized to be appropriated by the permit, ". . . 1,225,700 acre-feet per annum have heretofore been granted under Permit

- No. 954, the total amount to be appropriated under both permits not to exceed. . .1,391,530 acre-feet per annum." (Exh. J10a)
- 5. Application No. 1345 for Permit No. 1259 was filed with the Board of Water Engineers on March 7, 1938, and the permit was issued on May 25, 1938. (Exh. JlOa)
- 6. The LCRA is the owner of Permit No. 954, which authorized the construction and maintenance of a dam and 831,020 acre-foot capacity reservoir on the Colorado River in Llano and Burnet Counties and the impoundment, diversion and use therefrom of 1,225,700 acre-feet of water per year for "power development" (hydroelectric) purposes. (Exh. J13a)
- Application No. 1024 for Permit No. 954 was filed with the Board of Water Engineers on March 29, 1926, and the permit was issued on May 15, 1926. (Exh. J13a)
- 8. Lake Buchanan is located on the Colorado River in Burnet and Llano Counties. Buchanan Dam is located at diversion point D-2280 on the Colorado River in Survey No. 32, Burnet County, and Survey No. 12, Llano County, at the site authorized by Permit No. 1259 and approximately 4.5 miles upstream of the site authorized by Permit No. 954. (Exhs. 7 at p. 26, JlOa, Jl3a; SF 105-106, 110-111)
- 9. Construction was commenced on Buchanan Dam about April, 1931, and was completed in 1938 with the first deliberate impoundment of water on May 20, 1937. The first hydropower generating unit was placed in operation in January, 1938. (Exhs. J13d-e, J90; SF 361, 379-381)
- The impounding capacity of Lake Buchanan, as constructed, was approximately 992,000 acre-feet. (Exhs. J87, J90, 1231; SF 106-114, 293-294; Contest SF 105-106)
- 11. Permit No. 1259 authorized a dam 160 feet high and 11,000 long. Permit No. 954 authorized a dam 165 feet high and 2,500 feet long. (Exhs. JlOa, Jl3a)
- 12. Buchanan Dam is 145.5 to 150.5 feet high and approximately 11,200 feet long. (Exhs. J90, J120; SF 106)
- 13. A "Statement of Proposed Alteration of Plans under Permits to Appropriate Public Waters of the State of Texas," dated April 25, 1931, was filed with the Board of Water Engineers by the Emery, Peck and Rockwood Development Company, transferee of several permits, including Permit No. 954, from the Syndicate Power Company. The statement purported to be filed under TEX. REV. CIV. STAT. ANN. article 7495, repealed, Tex. Laws 1971, ch. 58 at 658. The statement proposed to construct the dam authorized under Permit No. 954 at a location on the Colorado River different from

that specified by the permit. The dam was proposed to be built at a height of 137 feet and length of 9,000 feet and having a storage capacity of 1,000,000 acre-feet. The statement further proposed to construct another dam approximately 70 feet high at the location specified by Permit No. 954. The statement recited that construction had begun on the larger dam; that a plan of the construction had been filed with the statement; and that additional detailed plans would be filed with the Board showing the size, location and character of the two additional dams to be constructed under Permits Nos. 954 and 955. (Exh. J13d)

- 14. On some date subsequent to November 3, 1936, the LCRA filed a request for extension of time for commencing or completing work under Permits Nos. 951, 952, 953, 954, 955 and 998. In this request, it was stated that construction of Buchanan Dam had begun about the month of April, 1931, and was nearing completion. It was further declared that Buchanan Dam had been built to a height of approximately 160 feet and a length of approximately 11,000 feet and would impound approximately 11,000,000 acre-feet of water. The location of the dam was shown on an attached plat. The request stated that complete plans and specifications of Buchanan Dam were on file with the Board of Water Engineers and that construction was nearing completion of a dam at the original site authorized by Permit No. 954, which was being called Inks Dam. (Exh. J13e)
- 15. Lake Buchanan is a variable level lake which was constructed primarily for hydropower generation and water supply, rather than flood control. There are three hydropower turbines located at Buchanan Dam with a discharge capacity of 1210 cfs each and a maximum hydropower generation capability of 36 megawatts. Due to the limited capacity of the Inks Dam turbines, normal operation is the generation of 24 megawatts with a 2420 cfs discharge rate through the turbines. (SF 323-328, 356, 375, 776-778, 785, 852)
- 16. There is a pump-back unit installed at diversion point D-2290 on Inks Lake just downstream from Buchanan Dam. The purpose of this unit is to pump water from Inks Lake back into Lake Buchanan to be reused for hydroelectric purposes. There are no interjacent appropriators between Buchanan Dam and D-2290. LCRA is authorized to use water at Buchanan and Inks Dams for hydroelectric generation and to use the bed and banks of the Colorado River to convey water for that purpose, among others. (Exhs. 7 at 25, J10a, J11, J13a, J13d-e; SF 110-111, 828-829)
- 17. The maximum amount of water used for hydropower purposes at Buchanan Dam was 1,679,300 acre-feet in 1958. (Exhs. J5la-jj, J136)
- 18. Permit 1259B, granted April 25, 1985, is a contractual amendment to Permit 1259 authorized under

the Texas Water Commission's Rules. Permit 1259B authorizes the Colorado River Municipal Water District (CRMWD) to divert at Stacy Reservoir Water to Which LCRA would otherwise be entitled under Permit 1259. Permit 1259B authorizes the diversion of 88,000 acre-feet per year for domestic and municipal use, and 25,000 acre-feet per year for industrial purposes. Permit 1259B was issued pursuant to a Settlement Agreement dated February 26, 1985 between CRMWD and LCRA, and the authorization to divert water at Stacy Reservoir shall remain effective only so long as the Settlement Agreement remains in effect. Permit 1259B contains the following language (paragraph 1(b)).

Under Permit No. 1259 and this amendment, the maximum combined diversions of LCRA at or below Lake Buchanan for domestic, municipal, industrial, irrigation, mining and hydroelectric generation purposes and that of CRMWD at Stacy Reservoir for domestic, municipal and industrial purposes shall not exceed 1,391,530 acre-feet of water per annum, or such amount as may be finally determined in the proceedings of adjudication of all claims of water rights in the Lower Colorado River Segment.

Permit No. 1259, as amended by Permit No. 1259B, is hereinafter referred to as "Permit No. 1259."

- 19. The Highland Lakes and the Colorado River above and below the Highland Lakes should be managed together as a single system for water supply purposes. Major goals in the management of the system include maximizing the beneficial use of water derived from inflows below the Highland Lakes, and stretching and conserving the water stored in the Highland Lakes. In order to achieve these goals, the system should be managed in accordance with the following general guidelines:
  - a. To the extent allowed by law, all demands for water from the Colorado River downstream of the Highland Lakes should be satisfied first pursuant to water rights to the run-of-river flow of the Colorado River.
  - b. Inflows should be passed through the Highland Lakes to honor downstream senior water rights only to the extent that demands under those rights cannot be satisfied by the inflows below the Highland Lakes.
  - c. Water should be released from conservation storage in Lakes Travis and Buchanan to satisfy downstream demands for authorized purposes (municipal, industrial, irrigation and mining) only to the extent that such demands cannot be satisfied pursuant to independent run-of-river water rights.
  - d. Firm, uninterruptible commitments of water from conservation storage in Lakes Travis and

Buchanan should not exceed the Combined Firm Yield of such lakes (hereinafter defined).

- e. Water from conservation storage in Lakes Travis and Buchanan may be available for supply on an interruptible basis at any time that the actual demand for stored water under firm, uninterruptible commitments is less than the Combined Firm Yield. To the extent that a demand for water may exist on a non-firm, interruptible basis, such stored water should be made available.
- f. The supply of stored water pursuant to non-firm, interruptible commitments should be interrupted or curtailed to the extent necessary to allow LCRA to satisfy all existing and projected demands for stored water pursuant to all firm, uninterruptible commitments.
- g. Water should not be released through any dam solely for hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for stored water from Lakes Travis and Buchanan pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments.
- 20. Water is supplied from conservation storage in Lakes Travis and Buchanan by the direct diversion of stored water from such lakes, the release of stored water from such lakes for downstream delivery, and the impoundment, diversion or use of the flows of the Colorado River and its tributaries upstream of such lakes pursuant to subordination and other agreements. Under the basic system management plan outlined above, the demand for stored water from Lakes Travis and Buchanan will be erratic. The demand for such water will vary greatly from year to year, depending upon the climatic conditions and the locations, amounts and distributions of demands during each year. It is currently estimated that the peak annual demand for stored water in the reasonably foreseeable future will not exceed 1,500,000 acre-feet in any year. Such a demand may occur during years in which the inflows below the Highland Lakes are very low. Such a demand for water on a non-firm, interruptible basis should develop.
- 21. The amount of water that the Highland Lakes/Colorado River system can supply each year on a firm basis through a repeat of the drought of record will vary greatly from time to time in the future, depending upon factors such as the locations of points of diversion and the demand for water at each diversion point. Generally, in order to provide a firm supply of water for a given annual demand, less stored water is needed to firm up the run-of-river supply as the point of diversion is

moved farther downstream. Assuming that large municipal, industrial and irrigation demands will continue to exist downstream of the Highland Lakes, the firm yield of the entire system will exceed the Combined Firm Yield of Lakes Travis and Buchanan.

- 22. The Combined Firm Yield is less than the Combined Theoretical Yield. The "Combined Theoretical Yield" is the amount of water that could be supplied from conservation storage in Lakes Travis and Buchanan during each year of a simulated repeat of the drought of record, as calculated pursuant to studies that assume the following:
  - a. Inflows to Lakes Travis and Buchanan are those flows that would occur in the Colorado River at the site of Mansfield Dam if the Highland Lakes did not exist and there were no other impoundment, diversion or use of the flows of the Colorado River and its tributaries upstream of that point.
  - b. No portion of the inflows will be passed through Mansfield Dam to honor downstream senior water rights.
  - c. Lakes Travis and Buchanan will be operated together as a system so as to maximize the yield of that system.

The "Combined Firm Yield" is that portion of the Combined Theoretical Yield remaining after it is assumed that inflows will be reduced by honoring upstream senior water rights and/or passed through Mansfield Dam to honor downstream senior water rights, in accordance with the relative priorities of such rights, except to the extent that the holder of any such right may agree otherwise. In determining the Combined Firm Yield, it is assumed that each senior water right will be exercised to the full extent authorized, except to the extent that the holder of such right may agree otherwise, or unless the Commission otherwise approves. The Combined Firm Yield may be expressed as a constant amount of water annually, or as an average annual amount of water over a defined period of years. The Combined Firm Yield cannot be determined until after the Adjudication is final, and such yield may change from time to time in the future. However, at the present time it is estimated that the Combined Firm Yield is not less than 500,000 acre-feet of water per year. As discussed above, this amount may also be expressed as an average of 500,000 acre-feet per year over any five consecutive calendar-year period, or a total of 2,500,000 acre-feet over any such period. The Commission will determine the Combined Firm Yield, and whether such yield is expressed as an average annual amount of water over a defined period of years, in its adoption of a Management Plan (hereinafter defined).

23. Subordination of hydroelectric rights will greatly increase the amount of water that LCRA has

available to supply from Lakes Travis and Buchanan for other purposes of use. LCRA in the past has subordinated its own hydroelectric rights to its rights to store and use water for other purposes. The City of Austin's early-priority hydroelectric right at Tom Miller Dam under C.F. 330 is the only hydroelectric right in the basin that is senior to Permit Nos. 1260 and 1259 for Lakes Travis and Buchanan, other than those held by LCRA. The City leased such right to LCRA pursuant to the 1938 and 1966 Agreements between the City and LCRA. LCRA in the past has also subordinated the C.F. 330 hydroelectric right that it leased from the City to LCRA's rights to store and use water for other purposes.

- 24. The extent to which additional stored water will be available in any year, after satisfying all existing and projected demands for stored water pursuant to all firm, uninterruptible commitments, can be defined at the beginning of that year pursuant to a rule curve or other analysis based on conditions that exist at that time. The availability of such additional stored water can be confirmed or redefined at other times during that year by one or more additional analyses at other times during that year based on conditions that exist at such times.
- 25. LCRA's right to use water from Lakes Travis and Buchanan for purposes other than hydroelectric generation, and the initial conditions for the commitment and supply of such water, should be defined as follows:

LCRA is recognized a right under Permits Nos. 1260 and 1259 to divert and use water from Lakes Travis and Buchanan for municipal, industrial, irrigation and mining purposes, with a priority date of March 7, 1938. LCRA may diligently develop such right to a maximum aggregate diversion and use of water for such purposes from Lakes Travis and Buchanan of not to exceed 1,500,000 acrefeet in peak-use years, with a priority date of March 7, 1938, subject to the following conditions:

(a) LCRA shall prepare and submit to the Commission, on or before December 31, 1988, a proposed reservoir operation plan which shall include such studies and other information as may be required by the Commission to determine the Combined Firm Yield of Lakes Travis and Buchanan (as defined in Finding 22, above) and demonstrate LCRA's compliance with, and its ability to comply with, these special conditions (the "Management Plan"). In making its decision on the adoption of an Management Plan, the Commission shall consider all relevant public policies including, without limitation, the following:

- (1) recognition of the necessity of beneficial inflows from the Colorado River into the Lavaca-Tres Palacios Estuary consistent with § 11.147 of the Texas Water Code;
- (2) protection of fish and wildlife habitats consistent with § 11.147 of the Texas Water Code;
- (3) consideration of the effects, if any, on existing instream uses and water quality consistent with § 11.147 of the Texas Water Code;
- (4) mitigation of adverse impacts, if any, on wildlife habitats inundated by new reservoir construction;
- (5) mitigation of adverse environmental impacts, if any, caused by new projects taking, storing or diverting in excess of 5,000 acre-feet per year consistent with § 11.152 of the Texas Water Code; and
- (6) recognition of the Commission's
   statutory authority to require
   water conservation under
   § 11.134(b)(4).

The Commission shall consider LCRA's proposal prior to adopting the initial Management Plan. The Management Plan may be amended from time to time upon the request of LCRA or on the Commission's own motion. The initial proceeding to consider the adoption of the Management Plan, and any major amendment thereof, shall be pursuant to contested case procedures. Any proceeding to consider the adoption or major amendment of the Management Plan shall be preceded by notice and opportunity to request a hearing in accordance with the Commission's regulations applicable to water rights permitting proceedings. The Texas Parks and Wildlife Department, at its option, may be a party in any such proceeding, in the same manner as it would be a party to a proceeding before the Commission incident to an application for a permit governed by Section 11.147 of the Texas Water Code. The Commission shall name as other parties persons that establish a justiciable interest in the proceeding. In making a final decision on the adoption of a Management Plan and any amendment thereof, the Commission, in addition to other information, evidence, and testimony presented, shall consider all information, evidence, and testimony presented by the Texas Parks and Wildlife Department, including, without

limitation, any memorandum of understanding between LCRA and Texas Parks and Wildlife Department relating to the management of the Highland Lakes.

- (b) LCRA shall prepare and submit to the Commission, on or before March 1 of each year beginning with March 1, 1990, a report which documents compliance with the Management Plan and these special conditions during the previous year. Such report shall be in a form approved by the Executive Director.
- (c) Except as provided in Special Condition (i), below, LCRA shall not supply or commit to supply any water under Permits Nos. 1260 or 1259 to any other party except pursuant to a written contract between LCRA and such party that defines such commitment.
- (d) LCRA shall not supply or commit to supply any water under Permits Nos. 1260 or 1259 to itself for use by itself or other parties except pursuant to resolution adopted by LCRA's Board of Directors that defines such commitment.
  - (e) Each commitment by LCRA to supply water under Permits Nos. 1260 or 1259 shall be considered to be on a firm, uninterruptible basis unless the contract, resolution or special condition defining such commitment specifically provides that such commitment "is subject to interruption or curtailment."
  - (f) LCRA shall not commit to supply water under Permits Nos. 1260 and 1259 on a firm, uninterruptible basis in excess of the Combined Firm Yield of Lakes Travis and Buchanan. During the period beginning as of January 1, 1988 until such time as the Management Plan is submitted and approved by the Commission, LCRA shall not enter into any contract or adopt any resolution by which it commits to supply any water under Permits Nos. 1260 or 1259 on a firm, uninterruptible basis, unless:
    - (1) the aggregate of all firm, uninterruptible commitments of water under Permits Nos. 1260 or 1259, including the commitment made pursuant to such contract or resolution, does not exceed 2,500,000 acre-feet over any five consecutive calendar-year period; or
    - (2) the commitment made pursuant to such contract or resolution is for municipal use, and such commitment does not exceed 10,000 acre-feet of water per year; or

- (3) such contract or resolution is specifically approved by either the Executive Director or the Commission pursuant to this special condition (f).
- (g) LCRA shall interrupt or curtail the supply of water under Permits Nos. 1260 and 1259 pursuant to commitments that are specifically subject to interruption or curtailment, to the extent necessary to allow LCRA to satisfy all demands for water under such permits pursuant to all firm, uninterruptible commitments. Commitments to supply water on a non-firm, interruptible basis may be interrupted or curtailed as necessary either on a pro-rata basis or in accordance with a system of priorities, as may be set forth in the various contracts and resolutions that define such commitments.
- (h) LCRA shall not impose its priority under Permits Nos. 1260 and 1259 against any junior permanent water right with a priority date senior to November 1, 1987, except to the extent that:
  - (1) LCRA would have the right to impose such priority against such water right if LCRA's right under Permits Nos. 1260 and 1259 to divert and use water from Lakes Travis and Buchanan were limited to the Combined Firm Yield of such lakes; or
  - (2) the holder of such water right has agreed, or in the future agrees, otherwise.
- (i) LCRA shall supply water under Permits Nos. 1260 and 1259 to or for the benefit of any downstream water right with a priority date junior to December 1, 1900 and senior to November 1, 1987 that authorizes the diversion of not more than 3000 acre-feet of water per year, to the extent that:
  - (1) the holder of such water right applies to the Commission for release of such water; and
  - (2) the Commission finds that, but for the exercise of priority claims under Certified Filings Nos. 44, 107, 330 and 376:
    - [a] water would be available for diversion from the natural flow of the Colorado River or tributary thereof at an

authorized point of diversion under such water right; and

[b] applicant's water right
 would entitle him to divert
 such water;

provided, however, that LCRA shall not be obligated to supply more than 20,000 acre-feet of water in any year pursuant to this Special Condition (i); that this commitment is subject to interruption or curtailment pro rata with other long-term interruptible commitments of LCRA; and that LCRA shall not be obligated to supply water under this special condition to or for the benefit of a temporary or term permit beyond the initial term thereof.

(j) LCRA may from time to time apply to the Commission for amendment of the above special conditions pursuant to Commission rules.

Additionally, LCRA's rights to use water for hydroelectric generation should include conditions that generally subordinate such rights to all present and future upstream rights to use the waters of the Colorado River and its tributaries for municipal, domestic, irrigation or industrial purposes. Such conditions should specifically prohibit the release of water through its dams solely for the purpose of hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments.

#### CONCLUSIONS:

- The alterations in the location and specifications of Buchanan Dam and Lake Buchanan from those originally authorized by Permit No. 954 were authorized by the substantial compliance with TEX. REV. CIV. STAT. ANN. art. 7495, repealed, Tex. Laws 1971, ch. 58 at 658.
- 2. LCRA is recognized a right under Permits Nos. 954 and 1259 to maintain an existing dam (Buchanan Dam) at diversion point D-2280 on the Colorado River in Survey No. 32, Burnet County, and Survey No. 12, Llano County, creating a reservoir (Lake Buchanan) with an impounding capacity of 992,475 acre-feet and to use the impounded water for recreation purposes without right of diversion, with a priority date of March 29, 1926.
- LCRA is recognized a right under Permits Nos. 954 and 1259 to divert and use water through Buchanan

Dam at a maximum rate of 3630 cfs for the purpose of hydroelectric generation, with a priority date of March 29, 1926, subject to the following conditions:

- (a) Such right is subordinated to the extent set forth in TEX. REV. CIV. STAT. ANN. art. 8280-107, as amended, Tex. Laws 1975, ch. 74 at 179, as such act may be amended from time to time (the "LCRA Act").
- (b) Such right is further subordinated, to the extent that it may not be subordinated pursuant to the LCRA Act, as follows:
  - (1) LCRA shall not release water through Buchanan Dam solely for the purpose of hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments; and
  - (2) To the extent that water is released through Buchanan Dam solely for the purpose of hydroelectric generation, such right is specifically subordinated, as to priority, to all present and future upstream rights to use the waters of the Colorado River and its tributaries for municipal, domestic, industrial, irrigation and/or mining purposes, except during emergency shortages of electricity, and during other times to the extent that the holder of any such upstream right has agreed, or in the future agrees, otherwise.
- 4. LCRA is recognized a right under Permits Nos. 1260 and 1259 to divert and use water from Lakes Travis and Buchanan for municipal, industrial, irrigation and mining purposes, with a priority date of March 7, 1938. LCRA may diligently develop such right to a maximum aggregate diversion and use of water for such purposes from Lakes Travis and Buchanan of not to exceed 1,500,000 acre-feet in peak-use years, with a priority date of March 7, 1938, subject to the following conditions:
  - (a) LCRA shall prepare and submit to the Commission, on or before December 31, 1988, a proposed reservoir operation plan which shall include such studies and other information as may be required by the Commission to determine the Combined Firm Yield of Lakes Travis and Buchanan (as defined in Finding 22, above) and demonstrate LCRA's compliance with, and its ability to comply with, these special conditions (the

"Management Plan"). In making its decision on the adoption of an Management Plan, the Commission shall consider all relevant public policies including, without limitation, the following:

- (1) recognition of the necessity of beneficial inflows from the Colorado River into the Lavaca-Tres Palacios Estuary consistent with § 11.147 of the Texas Water Code;
- (2) protection of fish and wildlife habitats consistent with § 11.147 of the Texas Water Code;
- (3) consideration of the effects, if any, on existing instream uses and water quality consistent with § 11.147 of the Texas Water Code;
- (4) mitigation of adverse impacts, if any, on wildlife habitats inundated by new reservoir construction;
- (5) mitigation of adverse environmental impacts, if any, caused by new projects taking, storing or diverting in excess of 5,000 acre-feet per year consistent with § 11.152 of the Texas Water Code; and
- (6) recognition of the Commission's
   statutory authority to require
   water conservation under
   § 11.134(b)(4).

The Commission shall consider LCRA's proposal prior to adopting the initial Management Plan. The Management Plan may be amended from time to time upon the request of LCRA or on the Commission's own motion. The initial proceeding to consider the adoption of the Management Plan, and any major amendment thereof, shall be pursuant to contested case procedures. Any proceeding to consider the adoption or major amendment of the Management Plan shall be preceded by notice and opportunity to request a hearing in accordance with the Commission's regulations applicable to water rights permitting proceedings. The Texas Parks and Wildlife Department, at its option, may be a party in any such proceeding, in the same manner as it would be a party to a proceeding before the Commission incident to an application for a permit governed by Section 11.147 of the Texas Water Code. The Commission shall name as other parties persons that establish a justiciable interest in the proceeding. In making a final decision on the adoption of a

Management Plan and any amendment thereof, the Commission, in addition to other information, evidence, and testimony presented, shall consider all information, evidence, and testimony presented by the Texas Parks and Wildlife Department, including, without limitation, any memorandum of understanding between LCRA and Texas Parks and Wildlife Department relating to the management of the Highland Lakes.

- (b) LCRA shall prepare and submit to the Commission, on or before March 1 of each year beginning with March 1, 1990, a report which documents compliance with the Management Plan and these special conditions during the previous year. Such report shall be in a form approved by the Executive Director.
- (c) Except as provided in Special Condition (i), below, LCRA shall not supply or commit to supply any water under Permits Nos. 1260 or 1259 to any other party except pursuant to a written contract between LCRA and such party that defines such commitment.
- (d) LCRA shall not supply or commit to supply any water under Permits Nos. 1260 or 1259 to itself for use by itself or other parties except pursuant to resolution adopted by LCRA's Board of Directors that defines such commitment.
- (e) Each commitment by LCRA to supply water under Permits Nos. 1260 or 1259 shall be considered to be on a firm, uninterruptible basis unless the contract, resolution or special condition defining such commitment specifically provides that such commitment "is subject to interruption or curtailment."
- (f) LCRA shall not commit to supply water under Permits Nos. 1260 and 1259 on a firm, uninterruptible basis in excess of the Combined Firm Yield of Lakes Travis and Buchanan. During the period beginning as of January 1, 1988 until such time as the Management Plan is submitted and approved by the Commission, LCRA shall not enter into any contract or adopt any resolution by which it commits to supply any water under Permits Nos. 1260 or 1259 on a firm, uninterruptible basis, unless:
  - (1) the aggregate of all firm, uninterruptible commitments of water under Permits Nos. 1260 or 1259, including the commitment made pursuant to such contract or resolution, does not exceed 2,500,000 acre-feet over

- any five consecutive calendar-year period; or
- (2) the commitment made pursuant to such contract or resolution is for municipal use, and such commitment does not exceed 10,000 acre-feet of water per year; or
- (3) such contract or resolution is specifically approved by either the Executive Director or the Commission pursuant to this special condition (f).
- (g) LCRA shall interrupt or curtail the supply of water under Permits Nos. 1260 and 1259 pursuant to commitments that are specifically subject to interruption or curtailment, to the extent necessary to allow LCRA to satisfy all demands for water under such permits pursuant to all firm. uninterruptible commitments. Commitments to supply water on a nonfirm, interruptible basis may be interrupted or curtailed as necessary either on a pro-rata basis or in accordance with a system of priorities, as may be set forth in the various contracts and resolutions that define such commitments.
- (h) LCRA shall not impose its priority under Permits Nos. 1260 and 1259 against any junior permanent water right with a priority date senior to November 1, 1987, except to the extent that:
  - (1) LCRA would have the right to impose such priority against such water right if LCRA's right under Permits Nos. 1260 and 1259 to divert and use water from Lakes Travis and Buchanan were limited to the Combined Firm Yield of such lakes;
  - (2) the holder of such water right has agreed, or in the future agrees, otherwise.
- (i) LCRA shall supply water under Permits Nos. 1260 and 1259 to or for the benefit of any downstream water right with a priority date junior to December 1, 1900 and senior to November 1, 1987 that authorizes the diversion of not more than 3000 acre-feet of water per year, to the extent that:
  - (1) the holder of such water right applies to the Commission for release of such water; and

- (2) the Commission finds that, but for the exercise of priority claims under Certified Filings Nos. 44, 107, 330 and 376:
  - [a] water would be available for diversion from the natural flow of the Colorado River or tributary thereof at an authorized point of diversion under such water right; and
  - [b] applicant's water right
     would entitle him to divert
     such water;

provided, however, that LCRA shall not be obligated to supply more than 20,000 acre-feet of water in any year pursuant to this Special Condition (i); that this commitment is subject to interruption or curtailment pro rata with other long-term interruptible commitments of LCRA; and that LCRA shall not be obligated to supply water under this special condition to or for the benefit of a temporary or term permit beyond the initial term thereof.

(j) LCRA may from time to time apply to the Commission for amendment of the above special conditions pursuant to Commission rules.

The rights recognized in this Conclusion 4 are duplicative of, and are not in addition to, those rights recognized in Conclusion 6 relating to LCRA's rights in Lake Travis, below.

- 5. LCRA is recognized a right to use the bed and banks of the Colorado River to convey water released from Lake Buchanan for use by LCRA or others entitled to use such water in the amounts and for the purposes recognized herein.
- 6. LCRA is recognized a right to maintain and operate its existing pump-back unit at diversion point D-2290, as an aid in utilizing the water authorized in Permits Nos. 954 and 1259 for hydroelectric purposes.

DIVERSION POINTS NOS. (MCRS): 2290 and 2380 (Inks Lake) TRACT NO: None

OWNERSHIP: Lower Colorado River Authority (LCRA)

IR. (MCRS): 260-261 APP. (MCRS): 25-26 XII/II SF 1-1128

(MCRS) II Contest SF 95-138

(LCRS) Contest SF Vols. III, IV, V and VII

SECTION 11.307 CLAIM: Under Permit No. 1259A and Section 11.303 Claim No. 5549 to maintain a dam and a 17,545 acrefoot capacity reservoir on the Colorado River and to impound, divert and use therefrom 1,391,530 acre-feet of water per year at a maximum diversion rate of 2600 cfs for hydroelectric purposes at an unspecified diversion rate, with a priority date of June 29, 1913 and prior. (Exh. J8)

#### FINDINGS:

- The LCRA is the owner of Permit No. 1259A, which authorized the construction and maintenance of a 16,400 acre-foot capacity reservoir on the Colorado River in Llano and Burnet Counties and the impoundment, diversion and use therefrom of 1,391,530 acre-feet of water per year for hydroelectric power purposes.
- A special condition in the permit concerns Permit No. 954:

The dam for which this permit is granted has been constructed by virtue and under the terms of Permit No. 954, heretofore granted by the Board to the Syndicate Power Company of Dallas, Texas, and the alterations and modifications thereof heretofore set out by declarations filed with this Board, as prescribed by Statute, and this permit shall be cumulative of and in addition to said Permit No. 954, and of the rights covered by said permit; provided that the total quantity of water to be impounded, diverted and appropriated shall not exceed the quantity set out in paragraph four hereof.

(Exh. J11)

- 3. Paragraph four of Permit No. 1259A declares that of the 1,391,530 acre-feet authorized to be appropriated, ". . 1,225,700 acre-feet of water per annum have heretofore been granted under Permit No. 954, the total amount to be appropriated under both such permits not to exceed . . 1,391,530 acre-feet per annum." (Exh. J11)
- Application No. 1345 for Permit No. 1259A was filed with the Board of Water Engineers on March 7, 1938, and the permit was issued on May 25, 1938. (Exh. J11)

- 5. The LCRA is the owner of Permit No. 954, which authorized the construction and maintenance of a dam and 831,020 acre-foot capacity reservoir on the Colorado River in Llano and Burnet Counties and the impoundment, diversion and use therefrom of 1,225,700 acre-feet of water per year for "power development" (hydropower) purposes. (Exh. J13a)
- Application No. 1024 for the permit was filed with the Board of Water Engineers on March 29, 1926, and Permit No. 954 was issued on May 15, 1926. (Exh. J13a)
- 7. Inks Lake is located on the Colorado River in Llano and Burnet Counties. Inks Dam is located at diversion point D-2380 on the Colorado River in Survey No. 531, Burnet County, and Survey No. 8, Llano County, at the site authorized by Permit No. 1259A and approximately 1.5 miles upstream of the site authorized by Permit No. 954. (Exhs. 7, p. 26, J11, J13a; SF 114-117)
- 8. Construction of Inks Dam began in 1936 and was completed in 1938 with the first deliberate impoundment of water in 1938. Hydropower generation began in June, 1938. (Exh. J90; SF 361-362)
- The impounding capacity of Inks Lake is approximately 17,545 acre-feet. (Exh. J90, SF 114-117)
- Permit No. 1259A authorized a dam 102 feet high and 1500 feet long. Permit No. 954 authorized a dam 165 feet high and 2500 feet long. (Exhs. J11, J13a)
- 11. Inks Dam is 98.5 feet to 100 feet high and 1550 feet long. (Exh. J90; SF 115-116)
- 12. A "Statement of Proposed Alteration of Plans under Permits to Appropriate Public Waters of the State of Texas" dated April 25, 1931, was filed with the Board of Water Engineers by the Emery, Peck and Rockwood Development Company, transferee of several permits including Permit No. 954, from the Syndicate Power Company. The statement purported to be filed under TEX. REV. CIV. STAT. ANN. art. 7495, repealed, Tex. Laws 1971, ch. 58 at 658. The statement proposed to construct the dam authorized under Permit No. 954 at another location upstream (Buchanan Dam) and to construct another dam at the location authorized by Permit No. 954. This dam would be approximately 70 feet in height. The statement further proposed to reduce the capacity of a reservoir authorized under Permit No. 955 (cancelled on February 7, 1967) so as not to result in an increased appropriation of water. The statement further declared that additional detailed plans would be filed with the Board showing the size, location and character of the two additional dams to be constructed under Permits Nos. 954 and 955. (Exh. J13d)
- 13. On some date subsequent to November 3, 1936, the LCRA filed a request for extension of time for

commencing or completing work under Permits Nos. 951, 952, 953, 954, 955 and 998. In this request, it was stated that construction had begun by the LCRA on Inks Dam at the site described in Permit No. 954. It was stated that the dam would be built to a height of approximately 102 feet and a length of approximately 1500 feet, creating a reservoir with a surface area of approximately 830 acres and storage capacity of approximately 16,400 acre-feet. The request stated that complete plans and specifications of Inks Dam were on file with the Board of Water Engineers. (Exh. J13e)

- 14. There are two turbines located at Inks Dam with a discharge capacity of 1300 cfs each and a maximum hydropower generation capability of 24 megawatts. Normal operation is a generation of 24 megawatts with a 2600 cfs discharge rate through the turbines. Operation at Inks Dam is coordinated closely with operation at Buchanan Dam, with Inks functioning primarily as a pass-through of flows released from Buchanan Dam and is essentially a limiting factor on releases from Buchanan Dam. Excess flows are routed through a gravity section in the dam. (SF 776-782, 852)
- The maximum amount of water used for hydropower purposes at Inks Dam was 1,015,400 acre-feet in 1946. (Exhs. J52a-jj, J136)
- 16. LCRA's rights to use water for hydroelectric generation should include conditions that generally subordinate such rights to all present and future upstream rights to use the waters of the Colorado River and its tributaries for municipal, domestic, irrigation or industrial purposes. Such conditions should specifically prohibit the release of water through its dams solely for the purpose of hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments.

#### CONCLUSIONS:

- The alterations in the location and specifications of Inks Dam and Inks Lake from those authorized by Permit No. 954 were authorized by the substantial compliance with TEX. REV. CIV. STAT. ANN. art. 7495, repealed, Tex. Laws 1971, ch. 58 at 658.
- 2. LCRA is recognized a right under Permits Nos. 954 and 1259A to maintain an existing dam (Inks Dam) at diversion point D-238O on the Colorado River in Survey No. 531, Burnet County, and Survey No. 8, Llano County, creating a reservoir (Inks Lake) with an impounding capacity of 17,545 acre-feet of water and to use the impounded water for nonconsumptive recreation with no right of diversion or release for this purpose, with a priority date of March 29, 1926.

- 3. LCRA is recognized a right under Permits Nos. 954 and 1259A to divert and use water through Inks Dam at a maximum rate of 2600 cfs for the purpose of hydroelectric generation, with a priority date of March 29, 1926, subject to the following conditions:
  - (a) Such right is subordinated to the extent set forth in TEX. REV. CIV. STAT. ANN. art. 8280-107, as amended, Tex. Laws 1975, ch. 74 at 179, as such act may be amended from time to time (the "LCRA Act").
  - (b) Such right is further subordinated, to the extent that it may not be subordinated pursuant to the LCRA Act, as follows:
    - (1) LCRA shall not release water through Inks Dam solely for the purpose of hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments; and
    - (2) To the extent that water is released through Inks Dam solely for the purpose of hydroelectric generation, such right is specifically subordinated, as to priority, to all present and future upstream rights to use the waters of the Colorado River and its tributaries for municipal, domestic, industrial, irrigation and/or mining purposes, except during emergency shortages of electricity, and during other times to the extent that the holder of any such upstream right has agreed, or in the future agrees, otherwise.

DIVERSION POINT NO. (MCRS): 2650 (Lake Lyndon B. Johnson) TRACT NO: None

OWNERSHIP: Lower Colorado River Authority (LCRA)

IR. (MCRS): 301-302
APP. (MCRS): 26
XII/II SF 1-1128
(MCRS) II Contest SF 95-138
(LCRS) Contest SF Vols. III, TV, V and VII

SECTION 11.307 CLAIM: Under Permits Nos. 953 and 953A and Section 11.303 Claim No. 5547 to maintain a 138,460 acrefoot capacity reservoir on the Colorado River and to impound, divert and use therefrom 1,305,000 acre-feet of water per year for hydroelectric purposes at a maximum diversion rate of 9,000 cfs and to divert 68,400 acre-feet and consume 15,700 acre-feet of water per year for industrial purposes at a maximum diversion rate of 5270 cfs. Claimed priority date is June 29, 1913 and prior. (Exh. J8)

#### FINDINGS:

- 1. The LCRA is the owner of Permit No. 953, which authorizes the construction and maintenance of a dam and 28,750 acre-foot capacity reservoir on the Colorado River in Llano and Burnet Counties and the impoundment, diversion and use therefrom of 1,305,000 acre-feet of water per year for power development (hydroelectric) purposes. The permit authorized the construction of the dam at about the southwest corner of Survey No. 509, Burnet County, at a height of 40 feet. (Exh. J19a)
- The maximum rate of flow set out in Permit No. 953 for water through the turbines for generation of hydroelectric power is 1810 cfs (814,500 gpm). (Exh. J19a)
- Application No. 1023 for Permit No. 953 was filed with the Board of Water Engineers on March 29, 1926, and the permit was issued on May 15, 1926. (Exh. J19a)
- 4. The LCRA is the owner of Permit No. 953A, which amends Permit No. 953 to authorize a point of diversion on Lake Lyndon B. Johnson and the diversion of an unspecified amount of water at this diversion point at a maximum diversion rate of 5270 cfs (2,370,000 gpm) for the circulation and recirculation of cooling water in the operation of a thermal-electric power plant. (Exh. J23a)
- Application No. 1023A for Permit No. 953A was filed with the Commission on August 24, 1970, and the permit amendment was issued on September 22, 1970. (Exh. J23a)
- 6. Lake Lyndon B. Johnson is located on the Colorado River in Llano and Burnet Counties. Wirtz Dam is located at diversion point D-2650 on the Colorado River in Surveys Nos. 18 and 4, Burnet County, approximately 6.5 miles downstream of the site

- authorized by Permit No. 953. (Exhs. 7 at p. 26, J19a; SF 117-122)
- Construction began on Wirtz Dam and Lake Lyndon B. Johnson in September, 1948 and was completed in 1951, with the first impoundment of water in May, 1951. Hydroelectric generation commenced on June 25, 1951. (Exh. J90; SF 362)
- The impounding capacity of Lake Lyndon B. Johnson, as-built, was approximately 138,500 acre-feet. (Exh. J90; SF 122)
- Permit No. 953 authorized a dam 40 feet high and 1200 feet long. (Exh. J19a)
- Wirtz Dam is 100 to 127.5 feet high, and its length consists of 1,146 feet of concrete plus 3,670 feet of rolled earth and rock with a concrete core. (Exh. J90; SF 118)
- 11. By order dated December 11, 1970, the Texas Water Rights Commission approved modifications in Wirtz Dam pertaining to (1) alteration of the spillway gates to provide for the installation of stop logs, and (2) construction of a new gated overflow section in the south abutment of the dam. The order did not mention the location, size or impounding capacity of the dam. (Exh. 1230)
- 12. There are two hydroelectric turbines located at Wirtz Dam with a total discharge capacity of 9000 cfs and a maximum hydropower generation capability of 52 megawatts. When operating proportionally with flows released from Inks Dam, 20 megawatts are generated. Excess flows are routed through floodgates in the dam. (SF 781-784)
- The maximum amount of water used for hydropower purposes at Wirtz Dam was 1,533,300 acre-feet in 1957. (Exhs. J53a-jj, J136)
- 14. The thermal-electric plant, known as the Ferguson Plant, on Lake Lyndon B. Johnson went into operation in 1974. There are three circulating water pumps in the plant which pump 92,000 gpm each of condenser water. There are three half-capacity cooling water pumps for plant cooling water which pump 3500 gpm each, with two being operated at any one time. Each year approximately 68,400 acrefeet of water is diverted out of Lake Lyndon B. Johnson at a maximum diversion rate of 630 cfs (283,000 gpm), with 15,000 to 15,700 acre-feet of water being consumed in this process by forced evaporation. (Exhs. J8, J23d, J55jj; SF 119, 1004-1007)
- 15. LCRA's rights to use water for hydroelectric generation should include conditions that generally subordinate such rights to all present and future upstream rights to use the waters of the Colorado River and its tributaries for municipal, domestic, irrigation or industrial purposes. Such conditions should specifically prohibit the

release of water through its dams solely for the purpose of hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments.

#### CONCLUSIONS:

- The alterations in the location and impounding capacity of Wirtz Dam and Lake Lyndon B. Johnson, as-built, from the location and impounding capacity set out in Permit No. 953 are substantial and required approval by the Board of Water Engineers pursuant to TEX. REV. CIV. STAT. ANN. art. 7492, repealed, Tex. Laws 1971, ch. 58 at 658. (Supp. 1984-1985)
- By issuing Permit 953A and its subsequent order dated December 11, 1970, the Texas Water Rights Commission approved the alterations in the location and impounding capacity of Wirtz Dam and Lake Lyndon B. Johnson as they presently exist.
- 3. LCRA is recognized a right under Permits Nos. 953 and 953A to maintain the existing Wirtz Dam and Lake Lyndon B. Johnson on the colorado River, with a capacity of 138,500 acre-feet, and to use the impounded water for recreation purposes with no right of diversion or release for this purpose, with a priority date of March 29, 1926.
- 4. LCRA is recognized a right under Permit No. 953 to divert and use water through Wirtz Dam at a maximum rate of 9000 cfs for the purpose of hydroelectric generation, with a priority date of March 29, 1926, subject to the following conditions:
  - (a) Such right is subordinated to the extent set forth in TEX. REV. CIV. STAT. ANN. art. 8280-107, as amended, Tex. Laws 1975, ch. 74 at 179, as such act may be amended from time to time (the "LCRA Act").
  - (b) Such right is further subordinated, to the extent that it may not be subordinated pursuant to the LCRA Act, as follows:
    - (1) LCRA shall not release water through Wirtz Dam solely for the purpose of hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments; and

- (2) To the extent that water is released through Wirtz Dam solely for the purpose of hydroelectric generation, such right is specifically subordinated, as to priority, to all present and future upstream rights to use the waters of the Colorado River and its tributaries for municipal, domestic, industrial, irrigation and/or mining purposes, except during emergency shortages of electricity, and during other times to the extent that the holder of any such upstream right has agreed, or in the future agrees, otherwise.
- 5. LCRA is recognized the right under Permit No. 953A to divert, circulate and recirculate water for industrial (power plant cooling) purposes from Lake Lyndon B. Johnson at its Ferguson Power Plant at a maximum diversion rate of 5270 cfs, and to consumptively use not to exceed 15,700 acre-feet of such water per annum in forced evaporation, with a priority date of August 24, 1970.

DIVERSION POINT NO. (MCRS): 3060 (Lake Marble Falls) TRACT NO: None

OWNERSHIP: Lower Colorado River Authority (LCRA)

IR. (MCRS): 315-316 APP. (MCRS): 28 XII/II SF 1-1128 (MCRS) II Contest SF 95-138

(LCRS) Contest SF Vols. III, IV, V and VII

SECTION 11.307 CLAIM: Under Permit No. 998 and Section 11.303 Claim No. 5546 to maintain a dam and 8,760 acre-foot capacity reservoir on the Colorado River and to impound, divert and use therefrom 1,305,000 acre-feet of water per year at a maximum diversion rate of 9600 cfs for hydroelectric purposes with a priority date of June 29, 1913 and prior. (Exh. J8)

### FINDINGS:

The LCRA is the owner of Permit No. 998 which authorizes the construction and maintenance of a dam and 23,640 acre-foot capacity reservoir and a 6723 acre-foot capacity reservoir on the Colorado River in Burnet County and the impoundment, diversion and use therefrom of 1,305,000 acre-feet per year of the ordinary and storm and flood flow of the Colorado River for power development (hydroelectric) purposes. (Exh. J26a)

- The maximum rate of flow set out in Permit No. 998 for water through the turbines for hydropower purposes is 1800 cfs (810,000 gpm). (Exh. J26a)
- Application No. 1022 for Permit No. 998 was filed with the Board of Water Engineers on March 29, 1926 and the permit was issued on November 4, 1927. (Exh. J26a)
- 4. Lake Marble Falls is located on the Colorado River in Burnet County. Starcke Dam is located at diversion point D-3060 on the Colorado River in Surveys Nos. 606 and 15, Burnet County, at the site authorized by Permit No. 998. (Exhs. 7 at p. 26, J26a; SF 126-127)
- Construction began on Starcke Dam and Lake Marble Falls in November, 1949, and was completed in October, 1951. Deliberate impoundment of water began in July, 1951, and power generation commenced on September 25, 1951. (Exh. J90; SF 362)
- The impounding capacity of Lake Marble Falls as built was approximately 8760 acre-feet. (Exh. J90; SF 127-128)
- Permit No. 998 authorized a dam 70 feet high and 748 feet long. (Exh. J26a)
- Starcke Dam is 98 to 100 feet high and 860 feet long. (Exh. J90; SF 127)
- 9. The record does not reflect that any statement and plans of the alterations in the specifications of Starcke Dam and Lake Marble Falls from those specified in Permit No. 998 were ever filed with the Board of Water Engineers or its successor agencies. (Exhs. J124, J125)
- 10. The alterations of Starcke Dam and Lake Marble Falls from the specifications authorized by Permit No. 998 resulted in a smaller storage capacity of the reservoir from that authorized in the permit.
- 11. There are two hydropower generating turbines located at Starcke Dam with a total discharge capacity of 8120 cfs and a maximum generating capacity of 32 megawatts. When operating proportionally with flows released from Inks Dam, the turbines generate approximately 10 megawatts. The power generation at Starcke Dam is coordinated closely with that at Wirtz Dam and the additional flows of the Llano River through Wirtz Dam are released through the turbines at Starcke Dam. Excess flows are routed through floodgates in the dam. (Exh. J90; SF 781-785)
- 12. The maximum amount of water used for hydropower purposes at Starcke Dam was 1,409,700 acre-feet in 1957. (Exh. J55a-jj, J136)
- 13. LCRA's rights to use water for hydroelectric generation should include conditions that generally subordinate such rights to all present and future upstream rights to use the waters of the

Colorado River and its tributaries for municipal, domestic, irrigation or industrial purposes. Such conditions should specifically prohibit the release of water through its dams solely for the purpose of hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments.

#### CONCLUSIONS:

- The alterations of Starcke Dam and Lake Marble Falls from the specifications authorized by Permit No. 998 were insubstantial and did not result in an increased appropriation of State water.
- Starcke Dam and Lake Marble Falls were constructed in substantial compliance with Permit No. 998.
- 3. LCRA is recognized a right under Permit No. 998 to maintain an existing dam (Starcke Dam) at diversion point D-3060 on the Colorado River in Surveys Nos. 606 and 15, Burnet County, creating a reservoir (Lake Marble Falls) with an impounding capacity of 8760 acre-feet of water and to use the impounded water for nonconsumptive recreation with no right of diversion or release for this purpose, with a priority date of March 29, 1926.
- 4. LCRA is recognized a right under Permit No. 998 to divert and use water through Starcke Dam at a maximum rate of 6120 cfs for the purpose of hydroelectric generation, with a priority date of March 29, 1926, subject to the following conditions:
  - (a) Such right is subordinated to the extent set forth in TEX. REV. CIV. STAT. ANN. art. 8280-107, as amended, Tex. Laws 1975, ch. 74 at 179, as such act may be amended from time to time (the "LCRA Act").
  - (b) Such right is further subordinated, to the extent that it may not be subordinated pursuant to the LCRA Act, as follows:
    - (1) LCRA shall not release water through Starcke Dam solely for the purpose of hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments; and
    - (2) To the extent that water is released through Starcke Dam solely for the

purpose of hydroelectric generation, such right is specifically subordinated, as to priority, to all present and future upstream rights to use the waters of the Colorado River and its tributaries for municipal, domestic, industrial, irrigation and/or mining purposes, except during emergency shortages of electricity, and during other times to the extent that the holder of any such upstream right has agreed, or in the future agrees, otherwise.

DIVERSION POINTS NOS. (MCRS): 9999 (Lake Travis) TRACT NO: None

OWNERSHIP: Lower Colorado River Authority (LCRA)

IR. (MCRS): 341-344 APP. (MCRS): 34-35 XII/II SF 1-1128 II Contest SF 95-138

SECTION 11.307 CLAIM: Under Permits Nos. 951, 952 and 1260 and Section 11.303 Claim No. 5551 to maintain a dam and 1,170,752 acre-foot capacity reservoir on the Colorado River (Lake Travis) and to impound, divert and use therefrom 1,500,000 acre-feet of water per year at a maximum diversion rate of 5529 cfs for "hydroelectric, municipal, domestic, industrial, etc." purposes, with a priority date of June 29, 1913 and prior. (Exh. J8)

#### FINDINGS:

- The LCRA is the owner of Permit No. 1260, which authorizes the construction and maintenance of a dam and 600,000 acre-foot capacity reservoir on the Colorado River in Travis County and the impoundment, diversion and use therefrom of 1,500,000 acre-feet per year of the ordinary and storm and flood flows of the Colorado River for domestic, municipal, (industrial), irrigation, mining and hydroelectric power purposes. (Exh. J41a)
- A special condition in Permit No. 1260 authorizes the LCRA to use the bed and banks of the Colorado River for the purpose of conveying impounded water to diversion points downstream for the uses authorized. (Exh. J41a)
- Another special condition in the permit concerns Permits Nos. 951 and 952:

The dam for which this permit is granted is being constructed by virtue and under the terms of Permits Nos. 951 and 952,

heretofore granted by this Board to the Syndicate Power Company of Dallas, Texas, and the alterations and modifications thereof heretofore set out by declarations filed with this Board, as prescribed by Statute, and this permit shall be cumulative of and in addition to Permits Nos. 951 and 952 and of the rights covered by said permits; provided, that the total quantity of water to be impounded, diverted and appropriated shall not exceed the quantity set out in paragraph four of this permit.

# (Exh. J4la)

- 4. Paragraph four of Permit No. 1260 recites that of the 1,500,000 acre-feet authorized by the permit to be appropriated, "...1,391,530 acre-feet have heretofore been granted under Permits Nos. 951 and 952, the total amount to be appropriated under all such permits not to exceed ... 1,500,000 acre-feet per annum." (Exh. J41A)
- Application No. 1346 for the permit was filed with the Board of Water Engineers on March 7, 1938, and Permit No. 1260 was issued on May 25, 1938. (Exh. J41a)
- 6. The LCRA is the owner of Permit No. 951 which authorized the construction and maintenance of a dam and 196,708 acre-foot capacity reservoir on the Colorado River and the impoundment, diversion and use therefrom of 1,391,530 acre-feet of water per year for "power development" (hydropower) purposes. (Exh. J36a)
- Application No. 1020 for the permit was filed with the Board of Water Engineers on March 29, 1926, and Permit No. 951 was issued on May 15, 1926. (Exh. J36a)
- 8. The LCRA is the owner of Permit No. 952, which authorized the construction and maintenance of a dam and 718,429 acre-foot capacity reservoir on the Colorado River and the impoundment, diversion and use therefrom of 1,391,530 acre-feet of water per year for power development (hydropower) purposes. (Exh. J31a)
- Application No. 1021 for the permit was filed with the Board of Water Engineers on March 29, 1926, and Permit No. 952 was issued on May 15, 1926.
- 10. Lake Travis is located on the Colorado River in Travis and Burnet Counties, Texas. Mansfield Dam is located at diversion point D-9999 on the Colorado River in Surveys Nos. 461 and 192, Travis County, at the site authorized by Permit No. 1260 and approximately one mile downstream of the site authorized by Permit No. 952. (Exhs. 7 at p. 34-35, J41a, J36a, J31a; SF 135-136)
- Construction began on Mansfield Dam in March, 1937. The first stages of the dam were completed

- in July, 1939. After the flood of 1938, the LCRA decided to extend the dam to its present height to provide additional flood control capacity. The present structure was completed May 17, 1942. Deliberate impoundment of water began on September 9, 1940 and the first hydroelectric generation unit was placed in operation on July 27, 1941. (Exh. J90a; SF 357-360, 382)
- 12. The impounding capacity of Lake Travis as constructed was approximately 1,170,752 acre-feet at normal maximum operating level (681 feet above m.s.l.). (Exh. J90; SF 136-137)
- 13. Permit No. 1260 authorized a dam 180 feet high and 2,325 feet long. Permit No. 951 authorized a dam 75 feet high and 1,102 feet long. Permit No. 952 authorized a dam 125 feet high and 3,200 feet long. (Exhs. J41a, J36a, J31a)
- 14. Mansfield Dam is 239.5 to 278 feet high and 2,423 feet long. (Exh. J90; SF 136)
- 15. On some date subsequent to November 3, 1936, the LCRA filed a request for an extension of time to commence or complete the construction of works authorized by Permits Nos. 951-955 and 998, including a request to extend the time for completion of Mansfield Dam. The request declared that construction had begun on the dam. The location and specifications of the dam and reservoir were the same as those which were later set out in Permit No. 1260. (Exhs. J13e, J4la)
- 16. By letter dated October 2, 1941, the LCRA sent to the Board of Water Engineers several construction plans. One plan clearly depicted Mansfield Dam at the height at which it was later constructed. (Exh. 1232, J122; Contest SF 112-113)
- 17. The LCRA secured federal funding to construct Mansfield Dam to its present height. In a March 13, 1941 contract, the Secretary of the Interior designated the LCRA as his agent to operate and maintain the dam upon its completion, solely for the purposes of regulating the flow of the Colorado River below the dam and controlling the floods of the river. The agreement further required that when there was no flood in progress in the river system above the dam, the storage capacity in the reservoir above elevation 681 feet m.s.l. would be available primarily for flood control and stream regulation and such capacity below this elevation would be primarily for power production; provided that the water surface elevation in the reservoir must never, under ordinary conditions when no flood is in progress, exceed elevation 691 feet m.s.l. The LCRA was further obligated by this agreement to release water impounded in the reservoir in anticipation of floods originating in the watershed above the dam and to be responsible for the time and manner of releasing stored waters in anticipation of floods, giving due regard to channel capacities of the river below the dam in making such releases.

Other agreements were later made between the parties concerning construction costs. (Exhs. J62a-c; SF 357-359)

- . 18. Federal regulation of the flood control function of Mansfield Dam eventually passed to the U.S. Army Corps of Engineers. In regulations effective from May 15, 1951 to April 1, 1976, when the surface water elevation of Lake Travis was below 681 feet m.s.l., the LCRA was not permitted to make releases which would result in a flow at Columbus, Texas in excess of 50,000 cfs, provided that no curtailment of normal hydropower releases were required. During periods when the surface water elevation in Lake Travis was above elevation 681 feet m.s.l., a minimum release of 5,000 cfs was required. Above elevation 691 feet m.s.l., releases were required at the maximum possible discharge rate without exceeding a flow of 50,000 cfs at Columbus, provided that no curtailment of normal hydropower operation would result thereby. Above elevation 722 feet m.s.l., the LCRA was authorized to discharge water at the rate necessary to protect the dam and appurtenances from major damage. (Exh. J131; SF 359)
  - 19. At the time of the adjudication hearing, the LCRA was operating Mansfield Dam pursuant to interim regulations adopted by the Corps of Engineers on April 1, 1976. These regulations were similar to the 1951 regulations except that the minimum release rate of water from Lake Travis between surface water elevation 681 and 683 feet m.s.l. was reduced to 3,000 cfs. (Exh. J130; SF 359-360, 377, 786-787, 816-822, 1091-1096)
  - 20. Mansfield Dam is the only significant flood control structure in the Highland Lakes. There are 40 floodgates in the dam with a gravity section at elevation 714 feet m.s.l. The maximum surface water elevation of Lake Travis to date is 707 feet m.s.l., which occurred July, 1963. The capacity of the flood pool between elevation 681 feet and 691 feet m.s.l. is approximately 780,000 acre-feet. All discharges from Mansfield Dam are through the hydropower turbines unless the turbines are not capable of routing the excess flows. (Exh. J90; SF 786-787, 816-822)
- 21. There are three hydropower generating turbines located at Mansfield Dam with a total discharge capacity of 5530 cfs and a maximum generating capability of 84 megawatts. When operating proportionally with flows released through the other Highland Lakes, the turbines generate approximately 20 megawatts. The variable lake level of Lake Travis permits 24-hour-a-day operation of the turbines. (Exh. J90; SF 783, 785-786)
- 22. The maximum amount of water used for hydropower purposes at Mansfield Dam was 2,063,185 acre-feet in 1968. (Exhs. J55a-jj, J136)
- Permit No. 4007, which was issued to the City of Cedar Park, Texas on August 23, 1983, authorizes

the City of Cedar Park to transfer from the Colorado River Basin not to exceed 7000 acre-feet per annum from the perimeter of Lake Travis on the Colorado River at a maximum diversion rate of 21,700 gpm (48.4 cfs) to the environs of the City of Cedar Park for municipal purposes, pursuant to the water supply contract dated May 24, 1983 between LCRA and the City of Cedar Park. (Exh. No. 1406)

- 24. Special Conditions in Permit No. 4007 provide that (1) water diverted to the City under the authority of Permit No. 4007, but not consumed, shall be returned at a designated point on Brushy Creek in the Brazos River Basin; and (2) that the authorization for the transbasin diversion is contingent upon the existence of a valid permit between LCRA and the City of Cedar Park. (Exh. No. 1406)
- 25. The City of Cedar Park will require all water authorized under Permit No. 4007 to meet future water demands, based on projected growth in the city over the next thirty years. (III Contest 21-27)
- 26. The Highland Lakes and the Colorado River above and below the Highland Lakes should be managed together as a single system for water supply purposes. Major goals in the management of the system include maximizing the beneficial use of water derived from inflows below the Highland Lakes, and stretching and conserving the water stored in the Highland Lakes. In order to achieve these goals, the system should be managed in accordance with the following general guidelines:
  - a. To the extent allowed by law, all demands for water from the Colorado River downstream of the Highland Lakes should be satisfied first pursuant to water rights to the run-of-river flow of the Colorado River.
  - b. Inflows should be passed through the Highland Lakes to honor downstream senior water rights only to the extent that demands under those rights cannot be satisfied by the inflows below the Highland Lakes.
  - c. Water should be released from conservation storage in Lakes Travis and Buchanan to satisfy downstream demands for authorized purposes (municipal, industrial, irrigation and mining) only to the extent that such demands cannot be satisfied pursuant to independent run-of-river water rights.
  - d. Firm, uninterruptible commitments of water from conservation storage in Lakes Travis and Buchanan should not exceed the Combined Firm Yield of such lakes (hereinafter defined).
  - e. Water from conservation storage in Lakes
    Travis and Buchanan may be available for
    supply on an interruptible basis at any time
    that the actual demand for stored water under

firm, uninterruptible commitments is less than the Combined Firm Yield. To the extent that a demand for water may exist on a non-firm, interruptible basis, such stored water should be made available.

- f. The supply of stored water pursuant to non-firm, interruptible commitments should be interrupted or curtailed to the extent necessary to allow LCRA to satisfy all existing and projected demands for stored water pursuant to all firm, uninterruptible commitments.
- g. Water should not be released through any dam solely for hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for stored water from Lakes Travis and Buchanan pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments.
- 27. Water is supplied from conservation storage in Lakes Travis and Buchanan by the direct diversion of stored water from such lakes, the release of stored water from such lakes for downstream delivery, and the impoundment, diversion or use of the flows of the Colorado River and its tributaries upstream of such lakes pursuant to subordination and other agreements. Under the basic system management plan outlined above, the demand for stored water from Lakes Travis and Buchanan will be erratic. The demand for such water will vary greatly from year to year, depending upon the climatic conditions and the locations, amounts and distributions of demands during each year. It is currently estimated that the peak annual demand for stored water in the reasonably foreseeable future will not exceed 1,500,000 acre-feet in any year. Such a demand may occur during years in which the inflows below the Highland Lakes are very low. Such a demand may also occur in other years, if a large demand for water on a non-firm, interruptible basis should develop.
- 28. The amount of water that the Highland Lakes/Colorado River system can supply each year on a firm basis through a repeat of the drought of record will vary greatly from time to time in the future, depending upon factors such as the locations of points of diversion and the demand for water at each diversion point. Generally, in order to provide a firm supply of water for a given annual demand, less stored water is needed to firm up the run-of-river supply as the point of diversion is moved farther downstream. Assuming that large municipal, industrial and irrigation demands will continue to exist downstream of the Highland Lakes, the firm yield of the entire system will exceed the Combined Firm Yield of Lakes Travis and Buchanan.

- 29. The Combined Firm Yield is less than the Combined Theoretical Yield. The "Combined Theoretical Yield" is the amount of water that could be supplied from conservation storage in Lakes Travis and Buchanan during each year of a simulated repeat of the drought of record, as calculated pursuant to studies that assume the following:
  - a. Inflows to Lakes Travis and Buchanan are those flows that would occur in the Colorado River at the site of Mansfield Dam if the Highland Lakes did not exist and there were no other impoundment, diversion or use of the flows of the Colorado River and its tributaries upstream of that point.
  - b. No portion of the inflows will be passed through Mansfield Dam to honor downstream senior water rights.
  - c. Lakes Travis and Buchanan will be operated together as a system so as to maximize the yield of that system.

The "Combined Firm Yield" is that portion of the Combined Theoretical Yield remaining after it is assumed that inflows will be reduced by honoring upstream senior water rights and/or passed through Mansfield Dam to honor downstream senior water rights, in accordance with the relative priorities of such rights, except to the extent that the holder of any such right may agree otherwise. In determining the Combined Firm Yield, it is assumed that each senior water right will be exercised to the full extent authorized, except to the extent that the holder of such right may agree otherwise, or unless the Commission otherwise approves. The Combined Firm Yield may be expressed as a constant amount of water annually, or as an average annual amount of water over a defined period of years. The Combined Firm Yield cannot be determined until after the Adjudication is final, and such yield may change from time to time in the future. However, at the present time it is estimated that the Combined Firm Yield is not less than 500,000 acre-feet of water per year. As discussed above, this amount may also be expressed as an average of 500,000 acre-feet per year over any five consecutive calendar-year period, or a total of 2,500,000 acre-feet over any such period. The Commission will determine the Combined Firm Yield, and whether such yield is expressed as an average annual amount of water over a defined period of years, in its adoption of a Management Plan (hereinafter defined).

30. Subordination of hydroelectric rights will greatly increase the amount of water that LCRA has available to supply from Lakes Travis and Buchanan for other purposes of use. LCRA in the past has subordinated its own hydroelectric rights to its rights to store and use water for other purposes. The City of Austin's early-priority hydroelectric right at Tom Miller Dam under C.F. 330 is the only hydroelectric right in the basin that is senior to

Permit Nos. 1260 and 1259 for Lakes Travis and Buchanan, other than those held by LCRA. The City leased such right to LCRA pursuant to the 1938 and 1966 Agreements between the City and LCRA. LCRA in the past has also subordinated the C.F. 330 hydroelectric right that it leased from the City to LCRA's rights to store and use water for other purposes.

- 31. The extent to which additional stored water will be available in any year, after satisfying all existing and projected demands for stored water pursuant to all firm, uninterruptible commitments, can be defined at the beginning of that year pursuant to a rule curve or other analysis based on conditions that exist at that time. The availability of such additional stored water can be confirmed or redefined at other times during that year by one or more additional analyses at other times during that year based on conditions that exist at such times.
- 32. LCRA's right to use water from Lakes Travis and Buchanan for purposes other than hydroelectric generation, and the initial conditions for the commitment and supply of such water, should be defined as follows:

LCRA is recognized a right under Permits Nos. 1260 and 1259 to divert and use water from Lakes Travis and Buchanan for municipal, industrial, irrigation and mining purposes, with a priority date of March 7, 1938. LCRA may diligently develop such right to a maximum aggregate diversion and use of water for such purposes from Lakes Travis and Buchanan of not to exceed 1,500,000 acre-feet in peakuse years, with a priority date of March 7, 1938, subject to the following conditions:

- (a) LCRA shall prepare and submit to the Commission, on or before December 31, 1988, a proposed reservoir operation plan which shall include such studies and other information as may be required by the Commission to determine the Combined Firm Yield of Lakes Travis and Buchanan (as defined in Finding 29, above) and demonstrate LCRA's compliance with, and its ability to comply with, these special conditions (the "Management Plan"). In making its decision on the adoption of an Management Plan, the Commission shall consider all relevant public policies including, without limitation, the following:
  - (1) recognition of the necessity of beneficial inflows from the Colorado River into the Lavaca-Tres Palacios Estuary consistent with \$ 11.147 of the Texas Water Code;

- (2) protection of fish and wildlife habitats consistent with § 11.147 of the Texas Water Code;
- (3) consideration of the effects, if any, on existing instream uses and water quality consistent with § 11.147 of the Texas Water Code;
- (4) mitigation of adverse impacts, if any, on wildlife habitats inundated by new reservoir construction;
- (5) mitigation of adverse environmental impacts, if any, caused by new projects taking, storing or diverting in excess of 5,000 acre-feet per year consistent with § 11.152 of the Texas Water Code; and
- (6) recognition of the Commission's statutory authority to require water conservation under § 11.134(b)(4).

The Commission shall consider LCRA's proposal prior to adopting the initial Management Plan. The Management Plan may be amended from time to time upon the request of LCRA or on the Commission's own motion. The initial proceeding to consider the adoption of the Management Plan, and any major amendment thereof, shall be pursuant to contested case procedures. Any proceeding to consider the adoption or major amendment of the Management Plan shall be preceded by notice and opportunity to request a hearing in accordance with the Commission's regulations applicable to water rights permitting proceedings. Texas Parks and Wildlife Department, at its option, may be a party in any such proceeding, in the same manner as it would be a party to a proceeding before the Commission incident to an application for a permit governed by Section 11.147 of the Texas Water Code. The Commission shall name as other parties persons that establish a justiciable interest in the proceeding. In making a final decision on the adoption of a Management Plan and any amendment thereof, the Commission, in addition to other information, evidence, and testimony presented, shall consider all information, evidence, and testimony presented by the Texas Parks and Wildlife Department, including, without limitation, any memorandum of understanding between LCRA and Texas Parks and Wildlife Department relating to the management of the Highland Lakes.

- (b) LCRA shall prepare and submit to the Commission, on or before March 1 of each year beginning with March 1, 1990, a report which documents compliance with the Management Plan and these special conditions during the previous year. Such report shall be in a form approved by the Executive Director.
- (c) Except as provided in Special Condition (i), below, LCRA shall not supply or commit to supply any water under Permits Nos. 1260 or 1259 to any other party except pursuant to a written contract between LCRA and such party that defines such commitment.
- (d) LCRA shall not supply or commit to supply any water under Permits Nos. 1260 or 1259 to itself for use by itself or other parties except pursuant to resolution adopted by LCRA's Board of Directors that defines such commitment.
- (e) Each commitment by LCRA to supply water under Permits Nos. 1260 or 1259 shall be considered to be on a firm, uninterruptible basis unless the contract, resolution or special condition defining such commitment specifically provides that such commitment "is subject to interruption or curtailment."
- (f) LCRA shall not commit to supply water under Permits Nos. 1260 and 1259 on a firm, uninterruptible basis in excess of the Combined Firm Yield of Lakes Travis and Buchanan. During the period beginning as of January 1, 1988 until such time as the Management Plan is submitted and approved by the Commission, LCRA shall not enter into any contract or adopt any resolution by which it commits to supply any water under Permits Nos. 1260 or 1259 on a firm, uninterruptible basis, unless:
  - the aggregate of all firm, uninterruptible commitments of water under Permits Nos. 1260 or 1259, including the commitment made pursuant to such contract or resolution, does not exceed 2,500,000 acre-feet over any five consecutive calendar-year period; or
  - (2) the commitment made pursuant to such contract or resolution is for municipal use, and such commitment does not exceed 10,000 acre-feet of water per year; or
  - (3) such contract or resolution is specifically approved by either the Executive Director or the

Commission pursuant to this special condition (f).

- (g) LCRA shall interrupt or curtail the supply of water under Permits Nos. 1260 and 1259 pursuant to commitments that are specifically subject to interruption or curtailment, to the extent necessary to allow LCRA to satisfy all demands for water under such permits pursuant to all firm. uninterruptible commitments. Commitments to supply water on a nonfirm, interruptible basis may be interrupted or curtailed as necessary either on a pro-rata basis or in accordance with a system of priorities, as may be set forth in the various contracts and resolutions that define commitments.
- (h) LCRA shall not impose its priority under Permits Nos. 1260 and 1259 against any junior permanent water right with a priority date senior to November 1, 1987, except to the extent that:
  - (1) LCRA would have the right to impose such priority against such water right if LCRA's right under Permits Nos. 1260 and 1259 to divert and use water from Lakes Travis and Buchanan were limited to the Combined Firm Yield of such lakes; or
  - (2) the holder of such water right has agreed, or in the future agrees, otherwise.
- (i) LCRA shall supply water under Permits Nos. 1260 and 1259 to or for the benefit of any downstream water right with a priority date junior to December 1, 1900 and senior to November 1, 1987 that authorizes the diversion of not more than 3000 acre-feet of water per year, to the extent that:
  - the holder of such water right applies to the Commission for release of such water; and
  - (2) the Commission finds that, but for the exercise of priority claims under Certified Filings Nos. 44, 107, 330 and 376:
    - [a] water would be available for diversion from the natural flow of the Colorado River or tributary thereof at an authorized point of diversion under such water right; and

[b] applicant's water right would entitle him to divert such water;

provided, however, that LCRA shall not be obligated to supply more than 20,000 acre-feet of water in any year pursuant to this Special Condition (i); that this commitment is subject to interruption or curtailment pro rata with other long-term interruptible commitments of LCRA; and that LCRA shall not be obligated to supply water under this special condition to or for the benefit of a temporary or term permit beyond the initial term thereof.

(j) LCRA may from time to time apply to the Commission for amendment of the above special conditions pursuant to Commission rules.

Additionally, LCRA's rights to use water for hydroelectric generation should include conditions that generally subordinate such rights to all present and future upstream rights to use the waters of the Colorado River and its tributaries for municipal, domestic, irrigation or industrial purposes. Such conditions should specifically prohibit the release of water through its dams solely for the purpose of hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments.

## CONCLUSIONS:

- The alterations in the location and specifications of Mansfield Dam and Lake Travis as set out in Permit No. 1260 from those authorized by Permits Nos. 951 and 952 were authorized by the substantial compliance with TEX. REV. CIV. STAT. ANN. art. 7495, repealed, Tex. Laws 1971, ch. 58 at 658.
- A plan of alterations of Mansfield Dam from the specifications set out in Permit No. 1260 was filed with the Board of Water Engineers in substantial compliance with TEX. REV. CIV. STAT. ANN. art. 7495, repealed, Tex. Laws 1971, ch. 58 at 658.
- The construction of Mansfield Dam to its present height and impounding capacity was authorized by the substantial compliance with TEX. REV. CIV. STAT. ANN. art. 7495, repealed, Tex. Laws 1971, ch. 58 at 658.

- 4. LCRA is recognized a right under Permits Nos. 951, 952 and 1260 to maintain a dam (Mansfield Dam) at Diversion Point No. 9999 on the Colorado River in Surveys Nos. 461 and 192, Travis County, creating a reservoir (Lake Travis) with an impounding capacity of 1,170,752 acre-feet and to use the impounded water for recreation purposes without right of diversion, with a priority date of March 29, 1926.
- 5. LCRA is recognized a right under Permits Nos. 951, 952 and 1260 to divert and use water through Mansfield Dam at a maximum rate of 5,530 cfs for the purpose of hydroelectric generation, with a priority date of March 29, 1926, subject to the following conditions:
  - (a) Such right is subordinated to the extent set forth in TEX. REV. CIV. STAT. ANN. art. 8280-107, as amended, Tex. Laws 1975, ch. 74 at 179, as such act may be amended from time to time (the "LCRA Act").
  - (b) Such right is further subordinated, to the extent that it may not be subordinated pursuant to the LCRA Act, as follows:
    - (1) LCRA shall not release water through Mansfield Dam solely for the purpose of hydroelectric generation, except during emergency shortages of electricity, and during other times to the extent that such releases will not impair LCRA's ability to satisfy all existing and projected demands for water from Lakes Travis and Buchanan under Permits Nos. 1260 and 1259 pursuant to all firm, uninterruptible commitments and all non-firm, interruptible commitments; and
    - (2) To the extent that water is released through Mansfield Dam solely for the purpose of hydroelectric generation, such right is specifically subordinated, as to priority, to all present and future upstream rights to use the waters of the Colorado River and its tributaries for municipal, domestic, industrial, irrigation and/or mining purposes, except during emergency shortages of electricity, and during other times to the extent that the holder of any such upstream right has agreed, or in the future agrees, otherwise.
- 6. LCRA is recognized a right under Permits Nos. 1260 and 1259 to divert and use water from Lakes Travis and Buchanan for municipal, industrial, irrigation and mining purposes, with a priority date of March 7, 1938. LCRA may diligently develop such right to a maximum aggregate diversion and use of water for such purposes from Lakes Travis and Buchanan of not to exceed 1,500,000 acre-feet in peak-use years, with a priority date of March 7, 1938, subject to the following conditions:

- (a) LCRA shall prepare and submit to the Commission, on or before December 31, 1988, a proposed reservoir operation plan which shall include such studies and other information as may be required by the Commission to determine the Combined Firm Yield of Lakes Travis and Buchanan (as defined in Finding 29, above) and demonstrate LCRA's compliance with, and its ability to comply with, these special conditions (the "Management Plan"). In making its decision on the adoption of an Management Plan, the Commission shall consider all relevant public policies including, without limitation, the following:
  - (1) recognition of the necessity of beneficial inflows from the Colorado River into the Lavaca-Tres Palacios Estuary consistent with \$ 11.147 of the Texas Water Code;
  - (2) protection of fish and wildlife habitats consistent with \$ 11.147 of the Texas Water Code;
  - (3) consideration of the effects, if any, on existing instream uses and water quality consistent with \$ 11.147 of the Texas Water Code;
  - (4) mitigation of adverse impacts, if any, on wildlife habitats inundated by new reservoir construction;
  - (5) mitigation of adverse environmental impacts, if any, caused by new projects taking, storing or diverting in excess of 5,000 acre-feet per year consistent with \$ 11.152 of the Texas Water Code; and
  - (6) recognition of the Commission's statutory authority to require water conservation under \$ 11.134(b)(4).

The Commission shall consider LCRA's proposal prior to adopting the initial Management Plan. The Management Plan may be amended from time to time upon the request of LCRA or on the Commission's own motion. The initial proceeding to consider the adoption of the Management Plan, and any major amendment thereof, shall be pursuant to contested case procedures. Any proceeding to consider the adoption or major amendment of the Management Plan shall be preceded by notice and opportunity to request a hearing in accordance with the Commission's regulations applicable to water rights permitting proceedings. The Texas Parks and Wildlife Department, at

its option, may be a party in any such proceeding, in the same manner as it would be a party to a proceeding before the Commission incident to an application for a permit governed by Section 11.147 of the Texas Water Code. The Commission shall name as other parties persons that establish a justiciable interest in the proceeding. In making a final decision on the adoption of a Management Plan and any amendment thereof, the Commission, in addition to other information, evidence, and testimony presented, shall consider all information, evidence, and testimony presented by the Texas Parks and Wildlife Department, including, without limitation, any memorandum of understanding between LCRA and Texas Parks and Wildlife Department relating to the management of the Highland Lakes.

- (b) LCRA shall prepare and submit to the Commission, on or before March 1 of each year beginning with March 1, 1990, a report which documents compliance with the Management Plan and these special conditions during the previous year. Such report shall be in a form approved by the Executive Director.
- (c) Except as provided in Special Condition (i), below, LCRA shall not supply or commit to supply any water under Permits Nos. 1260 or 1259 to any other party except pursuant to a written contract between LCRA and such party that defines such commitment.
- (d) LCRA shall not supply or commit to supply any water under Permits Nos. 1260 or 1259 to itself for use by itself or other parties except pursuant to resolution adopted by LCRA's Board of Directors that defines such commitment.
- (e) Each commitment by LCRA to supply water under Permits Nos. 1260 or 1259 shall be considered to be on a firm, uninterruptible basis unless the contract, resolution or special condition defining such commitment specifically provides that such commitment "is subject to interruption or curtailment."
- (f) LCRA shall not commit to supply water under Permits Nos. 1260 and 1259 on a firm, uninterruptible basis in excess of the Combined Firm Yield of Lakes Travis and Buchanan. During the period beginning as of January 1, 1988 until such time as the Management Plan is submitted and approved by the Commission, LCRA shall not enter into any contract or adopt any resolution by which it commits to supply any water under Permits

Nos. 1260 or 1259 on a firm, uninterruptible basis, unless:

- (1) the aggregate of all firm, uninterruptible commitments of water under Permits Nos. 1260 or 1259, including the commitment made pursuant to such contract or resolution, does not exceed 2,500,000 acre-feet over any five consecutive calendar-year period; or
- (2) the commitment made pursuant to such contract or resolution is for municipal use, and such commitment does not exceed 10,000 acre-feet of water per year; or
- (3) such contract or resolution is specifically approved by either the Executive Director or the Commission pursuant to this special condition (f).
- (g) LCRA shall interrupt or curtail the supply of water under Permits Nos. 1260 and 1259 pursuant to commitments that are specifically subject to interruption or curtailment, to the extent necessary to allow LCRA to satisfy all demands for water under such permits pursuant to all firm, uninterruptible commitments. Commitments to supply water on a nonfirm, interruptible basis may be interrupted or curtailed as necessary either on a pro-rata basis or in accordance with a system of priorities, as may be set forth in the various contracts and resolutions that define such commitments.
- (h) LCRA shall not impose its priority under Permits Nos. 1260 and 1259 against any junior permanent water right with a priority date senior to November 1, 1987, except to the extent that:
  - (1) LCRA would have the right to impose such priority against such water right if LCRA's right under Permits Nos. 1260 and 1259 to divert and use water from Lakes Travis and Buchanan were limited to the Combined Firm Yield of such lakes; or
  - (2) the holder of such water right has agreed, or in the future agrees, otherwise.
- (i) LCRA shall supply water under Permits Nos. 1260 and 1259 to or for the benefit of any downstream water right with a priority date junior to December 1, 1900 and senior to November 1, 1987 that

authorizes the diversion of not more than 3000 acre-feet of water per year, to the extent that:

- (1) the holder of such water right applies to the Commission for release of such water; and
- (2) the Commission finds that, but for the exercise of priority claims under Certified Filings Nos. 44, 107, 330 and 376:
  - [a] water would be available for diversion from the natural flow of the Colorado River or tributary thereof at an authorized point of diversion under such water right; and
  - [b] applicant's water right
     would entitle him to divert
     such water;

provided, however, that LCRA shall not be obligated to supply more than 20,000 acre-feet of water in any year pursuant to this Special Condition (i); that this commitment is subject to interruption or curtailment pro rata with other long-term interruptible commitments of LCRA; and that LCRA shall not be obligated to supply water under this special condition to or for the benefit of a temporary or term permit beyond the initial term thereof.

(j) LCRA may from time to time apply to the Commission for amendment of the above special conditions pursuant to Commission rules.

The rights recognized in this Conclusion 6 are duplicative of, and are not in addition to, those rights recognized in Conclusion 4 relating to LCRA's rights in Lake Buchanan, above.

7. LCRA is recognized a right to use the bed and banks of the Colorado River to convey water released from Lake Travis for use by LCRA or others entitled to use such water in the amounts and for the purposes recognized herein.