

SANTA FE COUNTY

1356824

Ordinance No. 1997 - 5

"An Ordinance Amending and Replacing Ordinance 1996-4 and Declaring a Moratorium on New Subdivisions Serviced by El Dorado Utilities Inc. and Encouraging Conservation Measures Within the El Dorado Utilities Inc. Service Area".

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF SANTA FE COUNTY:

Introduction

This ordinance amends and replaces Santa Fe County Ordinance 1996-4. Ordinance 1996-4 was declared in April, 1996 in response to a seasonal drought and evidence that El Dorado Utilities, Inc. (EDU) was experiencing a water supply shortfall. Evidence compiled and opinions rendered by County staff, consultants, and the State Engineer Office demonstrate the potential for a continuing water shortfall for existing customers, and the lack of a reliable source of supply for future development relying on the EDU system. In addition, adequate fire hydrant testing and reserves in supply tanks have been and continue to be ongoing issues with the County Fire Marshal's office.

A. The Santa Fe County Board of County Commissioners hereby FINDS:

1. El Dorado Utilities Inc. (EDU) is a water utility providing service within the County (see attached map).
2. EDU ground water production has increased about 15% per year since the late 1970's. Average population growth in Santa Fe County was about 3% per year for the same period. Groundwater use in the EDU service area increased five fold from 1985 to 1995. At buildout, the size of the system will nearly double according to EDU estimates.
3. Although the County has experienced a modest real estate slowdown in recent years, the Eldorado area share of total County permits for single family construction was about the same in 1995 and 1996, about 14% of permits issued. The Eldorado fire district is second only to the Edgewood fire district for all types of development permits issued in 1996.
4. Recent EDU ads featuring it's spokesman, "Hydro", predict about 6% growth in EDU connections in 1997. Customer growth averaged over 10% for the last several years according to EDU records.

- 1 5. EDU provides fire protection infrastructure and water storage in the service area. The
2 County Fire Marshal and Chief of the El Dorado Fire area coordinate with EDU in the
3 planning, review, and testing of fire protection equipment in the area.
- 4 6. The Santa Fe County Fire Code, Ordinance #1991-7, the "Fire Code", requires fire
5 hydrant testing twice a year. The Fire Code requires that any deficiencies or
6 malfunctions shall be remedied within two weeks of such determination. The Fire
7 Code provides that the Board of County Commissioners may declare each and every
8 violation and instance of noncompliance a misdemeanor, and may issue fines and
9 penalties.
- 10 7. Since 1995, no fire hydrants were tested until recently. EDU refused to allow fire
11 testing in 1996 asserting the needs of the system, even though the fall water demands
12 were historically quite low.
- 13 8. In several recent field tests of EDU's water distribution pipeline computer model, the
14 model failed to accurately predict field conditions.
- 15 9. EDU's Updated Master Plan dated October 1996, reported that in September 1996, its
16 water storage available for supply and fire protection purposes was under required
17 capacity in pressure zones 2 and 3. Zones 2 and 3 include portions of the Original
18 Eldorado de Santa Fe subdivision.
- 19 10. The Updated Master Plan forecasts that available tank storage will be less than
20 required in 2001 and 2006.
- 21 11. The County Fire Marshal recommends continuance of the moratorium on new
22 development until such time as adequate water availability is determined and hydrant
23 tests resume a normal schedule with favorable test results.
- 24 12. The EDU Updated Master Plan dated October 1996 reported that in September, 1996
25 EDU possessed 789 gallons per minute (gpm) or 1270 AFY of production capacity
26 from 11 wells, including the new well #13. Well #13's emergency permit from the
27 State Engineer was about to expire at the time. The State Engineer (SEO), the Public
28 Utilities Commission (PUC), and the County Hydrologist estimate that the reliable
29 and legal production available to EDU was less than 650 AFY in 1996.
- 30 13. In the Updated Master Plan, EDU estimated it supplies 1,991 units. The Master Plan
31 estimates current production required is equivalent to 1,083 acre feet per year (AFY).
32 Based on EDU records, EDU's highest historical production was 502.7 AFY in 1995.
- 33 14. EDU consistently exaggerates it's true water producing capabilities. The Master
34 Plan's "status of well production based on test flows and daily operations" estimates
35 production capability at 1014 gallons per minute (gpm) or 1633 AFY. According to
36 the PUC, in May, 1996, during a self declared water supply emergency, with 11 active
37 wells pumping 24 hours per day, EDU was pumping 328 gpm (528 AFY, if
38 sustained). Well #9, the Lamy well, was dry at the time.
- 39 15. According to New Mexico law, beneficial use is the basis, the measure, and the limit
40 of the right to use water. The amount of water production recognized as the water
41 right for municipal use is typically estimated at 60 percent of the proven pumping
42 capacity of a well, demonstrated by historical beneficial use (often the highest
43 historical annual volume).

- 1 16. The PUC estimated EDU's peak well production in 1996 was 319 gpm (513AFY),
2 using their standard analysis to evaluate water utilities. The State Engineer's analysis,
3 using a similar process, estimates EDU's proven production capacity to be from 365
4 AFY (Dec. 1996 memo), to 473AFY, (January 9, 1997 addendum).
- 5 17. The Findings of Ordinance 1996-4 list other older data supporting other estimates of
6 EDU well production and potential water rights. All regulatory agency's estimates
7 are lower than EDU's assertions.
- 8 18. EDU well #9, the Lamy well, went dry in the spring of 1996. The Lamy valley
9 aquifer relies on seasonal recharge from Galisteo Creek. It accounted for 36% of total
10 1995 production, and only 8% of the 1996 well share.
- 11 19. The Lamy well (#9) is one of 32 wells subject to a court order regarding wells EDU
12 is allowed to produce. The Lamy well is subject to litigation over having been
13 illegally moved from it's original location.
- 14 20. Of the 32 court order wells, 25 have estimated or declared capacities less than 20
15 gallons per minute. Declarations frequently exaggerate long term production
16 potential. Approximately twelve court order wells are currently hooked up to the
17 system. At least 4 wells were worked over and abandoned in the 1980's. Several
18 court order wells are in close proximity of one another, and several have not been
19 found in recent field checks.
- 20 21. Although EDU reportedly tested several court order wells in the early 1990's, that
21 information has not been released. EDU has chosen to drill at least 4 new wells in the
22 last two years.
- 23 22. Several of the active wells have suffered significant declines in average production
24 over time, according to the State Engineer. As much as one third to one half of the
25 early production capability, and water column, has been lost in several wells,
26 including well #2, their biggest producer in 1996.
- 27 23. EDU's newest well, the Torreon well (well #13), was drilled to a total depth of 1000
28 feet in 1995. The well only found about 40 feet of aquifer within 100 feet of the water
29 table, and plugged back to 300 feet.
- 30 24. Well #13 has been designated by the State Engineer Office (SEO) as supplemental to
31 well #2. Together these wells can share the historical beneficial use established in
32 well #2. The net is that minimal new water production has been added.
- 33 25. EDU drilled several exploratory wells in 1996. On November 12, 1996, EDU's
34 attorney Mr. Matthew Spangler stated "the new wells were very successful, ... the
35 utility has found at least 400 gallons per minute.... Probably more than that."
- 36 26. The Updated Master Plan allocates 400 gallons per minute to the 1996 exploratory
37 program wells. No mention is made of the State Engineer water rights application
38 process in determining the legal right to produce these wells. To date these wells lack
39 the legal right to produce.
- 40 27. Although the exploratory wells were drilled in the summer of last year, and most
41 were at least briefly tested, data and detailed interpretations of these wells have not
42 been released to the County for analysis.

- 1 28. In a Feb. 4 1997 letter to the Land Use Administrator from EDU President Mr.
2 James Wall states that "the (1996) test wells did identify a *rather* substantial amount
3 of water that *could possibly* be utilized in the *near* future" (emphasis added).
- 4 29. The Santa Fe County Land Development Code requires that new development prove
5 the availability of a 100 year groundwater source in specific wells.
- 6 30. EDU's consultant, Westwater Associates, states that "...long term ...tests of existing
7 and additional wells, (and) close monitoring ...in test wells will be necessary in order
8 to model or provide estimates of future long term resource potential". This finding
9 precludes production from these wells being booked to EDU's long term water supply
10 by the SEO or County Hydrologist.
- 11 31. The Updated Master Plan allocates 150 gpm and 75 gpm to new wells #10 and #11,
12 which lie within the Lamy valley aquifer.
- 13 32. EDU's hydrogeologic consultant's estimate of wells #10 and #11 range from 30-40
14 to 150 gpm, and 10-15 to 75 gpm, based on short well tests in 1995. These wells
15 have yet to be put to beneficial use. Consequently, their contribution to production,
16 potential water rights, and effects on other wells in the Lamy valley aquifer cannot be
17 estimated.
- 18 33. There has been no demonstration or report analyzing the sustainable and reliable
19 ground water supply that incorporates the facts of water production and use over the
20 last ten years. Based on estimates by the State Engineer, the County Hydrologist, and
21 the PUC, EDU lacks the demonstrated capacity and water rights to serve demand
22 projected for build out of lots already approved in the service area.
- 23 34. Not only does EDU lack demonstration of reserve capacity for those lots already
24 approved, they have a problem with the decline of existing wells. The loss of either
25 well #2 or #9 for the summer peak season would require the resumption of mandatory
26 conservation requirements like those adopted in 1996.
- 27 35. In 1996, under the County mandatory conservation program, EDU customers
28 consumed approximately 6000 gallons of water per month. Overall well usage in
29 1996 was 81% of 1995 pumpage. In 1994 and 1995 the average groundwater
30 produced to serve fewer customers ranged from about 7000 to 8000 gallons per
31 customer per month. According to data submitted to the SEO and the PUC, EDU's
32 "lost or unaccounted for" water losses, i.e. gross water produced exceeding sales,
33 averaged 32% from 1991 to 1995.
- 34 36. In part because of the moratorium associated with Ordinance 1996-4, EDU's reported
35 unaccounted for water losses were significantly lower than in proceeding years. EDU
36 reports that they sold more water than they produced in 1996.
- 37 37. EDU's Updated Master Plan estimates ultimate buildout, or "all known proposed and
38 infill" service to be 3740 connections, an 188% increase from current. The Master
39 Plan estimates that 2035 acre feet per year will be required at the level of service. For
40 comparison purposes, research by the SEO and the County Hydrologist's estimate
41 that EDU has demonstrated the beneficial use of from 350 to 800 AFY. It is unlikely
42 that EDU will establish by beneficial use the water rights they declare.
- 43 38. County Staff estimates over 1000 approved and build-able lots exist in EDU's
44 service area unaffected by this Ordinance.

1 39. A February 9, 1996 SEO office memorandum indicated that the SEO will continue to
2 give unfavorable opinions on new subdivisions which propose EDU as a source of
3 supply unless and until it receives information which demonstrates that EDU can
4 assure the required water availability. The Santa Fe County Hydrologist concurs with
5 these findings.
6

7 **B. The Santa Fe County Board of County Commissioners therefore concludes and**
8 **DECLARES:**
9

- 10 1. The continuing growth and corresponding water demand in the area, the
11 uncertain present and future production capacity of EDU, and the failure of
12 EDU to properly develop and maintain adequate storage, fire protection, and
13 reserve groundwater production raises ongoing and unresolved concerns about
14 the adequacy of EDU as a water supplier for new development.
- 15 2. That these concerns are directly linked to the public health, safety and welfare.
- 16 3. Voluntary water awareness and conservation continue to be required in the
17 EDU service area.
18

19 **C. WHEREFORE,** the Santa Fe County Board of County Commissioners **ADOPTS**
20 the following:
21

- 22 1. No new or pending applications for land divisions, master plans or subdivisions
23 which propose to utilize EDU water services will be deemed complete until all fire
24 protection and water supply requirements of the County Land Use Code, the County
25 Fire Code, and this Ordinance are satisfied. No new or pending applications for land
26 divisions, master plans and subdivisions which propose to utilize EDU water services
27 will be processed by the County Land Use Administrator, the County Development
28 Review Committee, or the Santa Fe County Board of County Commissioners. The
29 time during which this ordinance is in effect shall not be used in calculating the
30 period of the validity of an approved master plan in accordance with the Santa Fe
31 County Land Use Code.
32
- 33 2. New Subdivisions and land division applications which do not rely on EDU water
34 service will be processed subject to the Santa Fe County 1996 Land Development
35 Code. HOWEVER, No density adjustments beneath the respective Hydrologic Zone
36 Minimum Lot Size based on site specific hydrology reports will be considered until
37 an acceptable assessment of ground water availability in the vicinity of all EDU wells
38 is conducted.
39
- 40 3. Any commercial property which has final development plan approval prior to the
41 adoption of this ordinance may be subdivided in accordance with the County Code.
42
- 43 4. Building and development permit applications on legal lots of record will be acted
44 upon by the Santa Fe County Land Use Administrator. All building or development

1 permits issued will be subject to standard water conservation covenants of restriction
2 issued by the County with restrictions to the use of water conserving fixtures and
3 appliances; and water saving measures to be used in and around the property. Each
4 dwelling unit will be restricted to a total annual water use of 0.25 acre feet per annum.
5 The issuance of any permit will be specifically contingent on the permittee's
6 acceptance and adherence to all water use and conservation requirements outlined in
7 the covenants and this ordinance.

8
9 5. For the sole purpose of providing guidance to EDU and future applicants for
10 development approval, **Appendix A** lists suggested activities which will assist the
11 County in evaluating water availability and fire protection capabilities in the EDU
12 service area.

13
14 6. Based on conservation information available from EDU, the County, and the
15 community, residents within the EDU service area are encouraged to observe water
16 use and conservation measures adopted in 1996. The citizens should be aware of
17 their water use covenants of restrictions, and become better informed about their
18 water use and practices.

19
20 7. Typical water use in the City and County ranges from 0.22 to 0.33 acre feet per year.
21 In the absence of covenanted water use restrictions in some part of the EDU service
22 area, water users are encouraged to target their consumption to fall within this range.

23
24 8. The provisions of this ordinance shall apply within the service area of any successor
25 to EDU if the ownership, name or management of the EDU changes while this
26 ordinance is in effect.

27
28 9. If any provision of this ordinance is adjudged or declared to be illegal, the remainder
29 of the ordinance, not so adjudged, will remain in force and effect.

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31 10. This ordinance will take effect on the earliest date allowed by law following the
32 passage by the Santa Fe County Board of County Commissioners.

33
34 11. County staff shall present updates on the fire protection and water supply situation at
35 regularly scheduled meetings of the Santa Fe County Board of County Commissioners
36 approximately 90 days and 180 days from the effective date of this ordinance.

37
38 12. Prior to the removal of this moratorium the County Fire Marshal shall provide a
39 report and letter to the Commissioners stating that EDU has sufficient capability
40 and/or plans for reliable water supply, storage and fire flows to support build out of
41 all existing and proposed development areas.

42

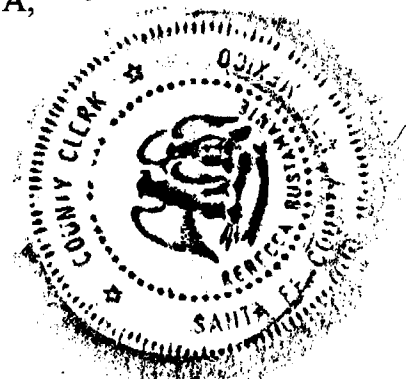
13. This ordinance shall remain in effect until the earlier of one year from it's effective date or until the Santa Fe County Board of County Commissioners, County technical staff, and the State Engineer are satisfied that developments which propose EDU as the water supply are in full compliance with state and county standards.

PASSED, ADOPTED AND APPROVED this 11th day of March, 1997, by the Santa Fe County Board of County Commissioners.

Richard D. Anaya
RICHARD D. ANAYA,
CHAIRMAN

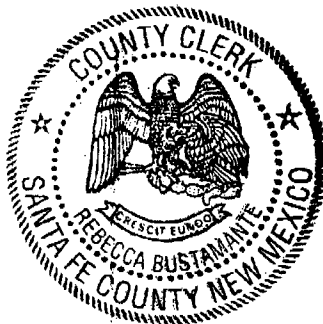
ATTEST:

Rebecca 'Becky' Bustamante
REBECCA 'BECKY' BUSTAMANTE
COUNTY CLERK



APPROVED AS TO FORM:

Steven Kopelman
STEVEN KOPELMAN, COUNTY ATTORNEY



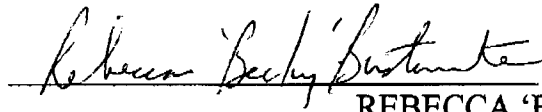
COUNTY OF SANTA FE)SS
STATE OF NEW MEXICO 9771778
I hereby certify that this instrument was filed
for record on the 21 day of March A.D.
19 97, at 8:38 o'clock A m
and was duly recorded in book 1356,
page 834-833 of the records of
Santa Fe County.

Witness my Hand and Seal of Office
Rebecca Bustamante
County Clerk, Santa Fe County, N.M.

Claronia Clayton
Deputy

1 **CERTIFICATE OF FILING**
2

3 I, Rebecca 'Becky' Bustamante, County Clerk, do hereby certify that the
4 foregoing ordinance, designated as Ordinance, No. 1997 - 05, was filed in
5 my office on the 21st day of March, 1997, in book Number 1356 at
6 Page 824-833.

7
8 **SANTA FE COUNTY CLERK**
910 
1112 **REBECCA 'BECKY' BUSTAMANTE**
13

Appendix A

Following are suggested activities which will assist the County in evaluating water availability and fire protection in the EDU service area.

- a. Test Fire Hydrants and the related system to the satisfaction of the local Fire Chief and Santa Fe County Fire Marshal. Report results, identify and mark in the field all non- functioning or unreliable hydrants and components, perform necessary work to bring the system into full compliance.
- b. Present a working computer model of the existing water supply system. The model should be successfully field tested at least twice in each pressure zone. The model should accurately represent and predict all aspects of the system. With each addition, modification, or extension of the system the model must be reverified by field tests before being accepted by the Fire Marshal.
- c. Comply fully with requirements of the Santa Fe County Fire Code, Ordinance 1991-7, and for violations as described therein shall be subject to penalties as described in the Code, page 6.
- d. Complete all system upgrades and improvements identified by EDU, the Fire Marshal, and County technical staff as required to service present and approved, undeveloped customers (lots) in the service area. Such upgrades and improvements includes tanks, line extensions, computer models , verification etc. reported in progress or deemed necessary by EDU, the SEO, PUC, and the County.
- e. Formulate, evaluate and present options, including a detailed timetable, for securing the long term water supply to the EDU's service area. This will include a detailed engineering evaluation of the cost and feasibility of extending the County water distribution system to the EDU system. The County Water Company can potentially wheel or wholesale water to the EDU. This study in no way commits the County Water Company to service in the Eldorado EDU service area. The EDU will prepare a detailed feasibility study of acquiring sufficient water rights to meet and or supplement the system's long term water supply needs.
- f. Resolve the lawsuit regarding the Lamy well. EDU and it's President have stated publicly that should the litigation with the State Engineer be unsuccessful, EDU can return to the old well, and abandon the newer well at issue. Because of it's importance to EDU's water supply, and the cloud of uncertainty regarding the "move to" well, resolve this issue once and for all.
- g. Prepare a Hydrogeologic Report in the format prescribed by the County Land Development Code that assesses the current status of the known ground water resource and it's potential to service the area for 100 years at full buildout, now estimated by the EDU at 3740 units. The physical water availability, and water rights, must be addressed. The report must satisfy the State Engineer and County Hydrologist's review pursuant to the State Subdivision Act and County Code.
- h. EDU reports that many problems associated with observed declines in EDU's wells are mechanical, and that the aquifer remains capable of producing to the

- 1 wells original reported capacity. Demonstrate this by remediating or replacing at
2 least 3 of the top 5 producing wells.
- 3 i. EDU reports that it possess more than 10 inactive wells that are capable of
4 production and in which EDU attributes significant water rights. To verify these
5 assertions, Select, reenter, redrill, or remediate at least three historically inactive
6 "Court Order" wells to provide estimates of their capability to produce. Invite
7 representatives of the SEO and the County to supervise field operations, and will
8 make all data and interpretations available to same. If successful, present detailed
9 plans to include such wells in the system, including estimates of each wells long
10 term contribution to the system.
- 11 j. Drill and complete a production well at a location near exploratory test wells in
12 the Madera limestone producing zone, and conduct a long term test with
13 monitoring. Report plans and results to the SEO and County Hydrologist.
- 14 k. Investigate and report on the feasibility of constructing a digital groundwater
15 model incorporating all EDU system wells in the Piedmont province. The
16 objective of this model will be to simulate areal drawdowns due to the combined
17 effects of all EDU pumping centers, and to calculate a schedule of effects on all
18 wells and the ground water resource in the Service area and adjoining areas (i.e
19 the Galisteo basin from Cerrillos to Canada de los Alamos).
- 20 l. Construct a digital groundwater model incorporating all Lamy valley alluvial
21 aquifer wells (excluding domestic wells) between Highway 285 and bedrock
22 outcrops northeast of Lamy. The objective of this model will be to simulate areal
23 drawdowns due to the combined effects of all EDU pumping centers, and to
24 calculate a schedule of effects on all wells and the ground water resource in the
25 Service area and adjoining areas.
- 26 m. In all current and future construction and development, obtain all required permits
27 and approvals, and be subject to review and inspection consistent with the
28 requirements of the Santa Fe County Land Development Code Ordinance 1996-
29 10, including the Code's terrain management regulations.
- 30 n. Maintain low unaccounted water losses in water distribution systems, and
31 maintain a tracking and reporting system of identified losses and accidents.
32 Report system construction, water sales, water levels and water production in
33 individual wells and other data in a format acceptable to the SEO, PUC, and
34 County.
- 35 o. Prepare and distribute materials acceptable to the County that educates EDU
36 customers on their water use and conservation. Water related details of
37 conservation covenants of the various subdivisions within the service area should
38 be summarized and published. One such publication should teach customers to
39 read their own meters.
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